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SITE NAME	SAUGET AREA I				
DOC ID#	153498				
DOCUMENT VARIATION	X COLOR OR X RESOLUTION				
PRP	RMD - SAUGET AREA I				
PHASE	SAS				
OPERABLE UNITS					
PHASE (AR DOCUMENTS ONLY) Remedial Removal Deletion Docket Original Update # Volumeof					
COMMENT(S)					
	MAPS & PHOTOGRAPHS				
FRC 643					

L1631210002/St. Clair County
PT's Show Club 375 711 PT's Show Club AKA Site P, or Sauget/Monsanto Ldfl. ILD 984809293 153498 Superfund/HRS **CERCLA** Preliminary Assessment Report Illinois Environmental **Protection Agency** P.O. Box 19276, Springfield, IL 62794-9276

Pre-Keme.

SECTION 1 EXECUTIVE SUMMARY

CERCLA Preliminary Assessment Report

for

PT's Show Club AKA Sauget/Monsanto Landfill, Site P

ILD 984809293

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Executive Summary

On October 26, 1990 PT's Show Club was placed on the Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS), as a result of a request for discovery action initiated by the Illinois Environmental Protection Agency (IEPA). The request was based on past disposal practices at the former Sauget/Monsanto Landfill, where PT's Show Club is now located. It is believed that PT's Show Club is one of many sites in Sauget (formerly Monsanto) and northern Cahokia, which has contributed to the degradation of environmental quality in this area.

PT's Show Club, Aka the Sauget/Monsanto Landfill or Site P, is an inactive, IEPA permitted landfill. Located in an industrialized and commercialized area of Sauget, Illinois, the acutely triangulated site covers approximately 20 acres west of Illinois Route 3 and just north of Monsanto Avenue. The features of the former landfill are depicted on the following page. Site P lies within the southern part of Section 23 and the northern part of Section 26 of Township 2 North, Range 10 West of the Third Principal Meridian in St. Clair County.

Site P is bordered: on the west by the Terminal Railroad
Association railroad; on the south by Monsanto Avenue; and on
the east by the Illinois Central Gulf Railroad. The two

1-2
PA: PT's Show Club AKA Sauget/Monsanto Ldfl, Site P ILD984809293

railroads converge to delineate the north boundary, thus creating the triangulated site. The landfill can be seen during its operation in a 1978 aerial photograph contained in Section 3 of this report.

In 1972, Paul Sauget of Sauget and Company entered into a lease agreement with the Union Electric Company to operate a waste disposal facility. In January of 1973, IEPA issued an operating permit to Sauget and Company to accept only non-chemical waste from Monsanto. Sauget and Company subsequently applied for, and was granted, a supplemental permit in 1974 which allowed acceptance of general waste and diatomaceous earth filter cake from Edwin Cooper, Incorporated (now Ethyl Corporation).

The IEPA began conducting routine inspections of the facility in 1974, at which time no violations were evident. In October of 1975, an inspector observed a small amount of yellowish, tar-like liquid in an area adjacent to several crushed fiber drums which were labelled "Monsanto ACL-85, Chlorine Composition." Sauget and Company and Monsanto were subsequently notified of this permit violation, and the matter was not further addressed. In December of 1977, an inspection revealed the disposal of approximately 25 metal containers (12-15 gallon) full of phosphorus pentasulfide (P2S5), a flammable solid. IEPA required Monsanto to excavate and remove all of this material from the site, and

to discontinue disposal of any chemical wastes or packages.

During the same inspection, IEPA became aware of another potential problem. A Southern Railway slag pile was being used for intermediate and final cover material. Analysis of this slag showed it to be unsuitable as cover due to its high permeability and heavy metal content. Cinders were also being used as cover material at Site P, thus posing the same problems as the slag, that is, increased surface water infiltration and the resulting potential for leaching heavy metals along with organic wastes into the groundwater.

IEPA inspections of the landfill in 1978 and 1979 indicated non-permitted disposal of Monsanto ACL filter residues and packages. The composition of this material is not known. According to the site operator at that time, this material would occasionally ignite when it came in contact with the filter cake waste from Edwin Cooper.

An Illinois-American Water Company distribution main was discovered in 1980 during a preparatory landfill excavation on the southern portion of the site. Following discovery of the water line, plans and permits were modified to include no waste disposal within 100 feet of the line. Landfill operations continued until 1984.

IEPA files contain waste quatities and characteristics for

the Edwin Cooper filter cake that was disposed of at Site P, however, Monsanto's wastestream information was not made available to the state agency. Records indicate that approximately 117,000 cubic yards of Edwin Cooper filter cake was accepted. Based on EP toxicity results submitted in 1973, the filter cake was classified as non-hazardous special waste (authorization permit number 740017). Additional analytical data is available for a filter cake composite sample from Edwin Cooper in 1979 which indicates elevated levels of lead at 18.4 parts per million (ppm) cadmium at 1.8 ppm, zinc at 7220 ppm and a pH of 11.22. No groundwater monitoring program has been established for Site P, nor have wastes at the site been fully characterized.

Aerial photographs that predate the 1970's, show no indications of previous waste disposal activities at the site. Prior to 1979, portions of Site P were owned by the Union Electric Company and the Illinois Central Gulf Railroad. Currently, Site P is owned as Trust Property for Paul Sauget (Bank of Belleville, Illinois) and Union Electric Company in St. Louis.

In 1985, IEPA contracted Ecology and Environment,
Incorporated (E&E) to investigate 12 suspected uncontrolled
hazardous waste sites and six segments of Dead Creek in
Sauget and Cahokia. Site P was among the 12 sites with which
soil borings, and subsurface soil samples were collected.

The results of E&E's investigation were used in preparation of this report.

During the E&E investigation of Site P, five 30-40 feet soil borings were drilled to investigate subsurface conditions at the site. The borings indicate that fill material consisting of silty clay, cinders, slag, and refuse were disposed directly on the land surface. The thickness of the fill ranges from 13 feet at boring P1 to 28 feet at boring P2. general, the surface of the site is covered with 1-2 feet of cinders and slag. Fill material was observed at all five boring locations. With the exception of P1, fine-to medium grained sand was found immediately below the fill in each of the borings. This sand was present to boring termination at 30-40 feet. In P1, 5 feet of brown silty clay was found below the fill prior to the fine- to medium-grained sand. The absence of clay and the relatively greater thickness of the fill at other boring locations suggests that clay materials may have been scraped from the surface or reworked to incorporated debris when disposal was initiated.

Significant waste material layers were generally not observed, although odors were noted in some of split-spoon samples containing fill. The boring logs are contained as Reference #1 of this report.

Analysis of four samples of subsurface soils collected from

two borings at Site P revealed eight volatile compounds present in sample P1-53 and two volatile compounds in sample P2-54. No volatiles were detected in samples P5-55 and P5-56. The highest concentrations of any volatile contaminants detected were 0.41 milligrams per kilogram of soil (mg/kg) of toluene and 0.45 mg/kg of xylenes in sample P1-53.

Three semi-volatile compounds were found to be present in P1-53. The analysis showed 3.9J mg/kg of phenol, 8.9J mg/kg of of 1,4-dichlorobenzene and 3.6J mg/kg of 1,2-dichlorobenzene in the sample. No semi-volatiles were detected in samples: P2-54, P5-55 and P5-56. The following table summarizes the subsurface sample results for Site P.

Summary of Subsurface Soil Sample Results for Site P

Chemical <u>Name</u>	Number of <u>Detections</u>	Highest <u>Conc.</u>	Sample with Highest Conc.
Volatiles			
toluene chloroform benzene ethylbenzene xylenes 4-methyl-pentano chlorbenzene	1	0.41 0.01 0.05 0.12 0.45 0.05	P1-53 P1-53 P1-53 P1-53 P1-53 P1-53
hexanone Semi-volatiles	2	0.05	P1-53
1,4-dichlorobenze 1.2-dichlorobenze phenol		8.9J 3.6J 3.9J	P1-53 P1-53 P1-53

Conc.-Concentration, J-estimated value, values in mg/kg (ppm)

Although no pesticides or PCB's were detected in the Site P subsurface soil samples, inorganic contaminants were found. An elevated concentration of lead was detected in sample P5-55 and elevated concentrations of cyanide were detected in samples P5-55 and P4-54. The lead concentration in P5-55 was 5 to 10 times background. The analytical data is provided in Reference number 2.

IEPA personnel visited Site P on June 26, and July 31, 1991. During the former visit, PT's well was sampled as part of the CERCLA Screening Site Inspection field activities for Sauget Area \$2 Sites. The on-site well supplies PT's Show Club patrons with ice and drinking water. While sampling the well, Paul Takacs of IEPA, screened portions of the site with a HNu photo-ionization detector. The instrument readings at ground level indicated the presents of organic volatiles well above background (up to 150 units above background) at the east central portion of the site. Other areas of the site were not screened.

Surface topography at Site P is characterized by steep sloping landfill sides along its east and south-central portions. Deep erosional channels have cut into these slopes. The majority of the site is covered with cinders. A depression is found along the east perimeter (where elevated HNu readings were obtained), adjacent the Terminal Railroad Association railroad. Surface drainage is to the south-

central portion of the site, which was not landfilled due to the presence of a potable water line in this area. Surface drainage will not leave the site due to the presence of railroad embankments along the perimeter and the depression in the central portion of the site. Access to the site is not restricted.

Site P is located in an area known as the American Bottoms.

ISGS well logs indicate that the upper stratigraphy in this area consists of 70-120 feet of unconsolidated alluvium and glacial outwash overlying Mississippian aged limestone and sandstone formations (Ste. Genevieve and St. Louis Limestones). The valley fill deposits are composed of two formations, the uppermost being the Cahokia Alluvium followed by the Mackinaw Member of the Henry Formation.

The Cahokia Alluvium is composed predominantly of silt, clay and fine sand deposits, generally indicative of a aggrading environment. In the vicinity of Dead Creek, these deposits vary in thickness, with a range of 15 to 30 feet. This formation was laid down via flood events, eolian activity, bank slumping, erosion and/or slugs of material deposited directly by tributary steams. The Mississippi River has frequently reworked this formation in such a way that coarser material is intermingled with finer-grained deposits.

Underlying the Cahokia Alluvium is the Mackinaw Member of the

Henry Formation. This formation is composed of sand and gravel from glacial outwash. At the Dead Creek area, this material rest directly on the bedrock surface and varies between 70 and 100 feet in thickness. Reference #3 contains area well logs which describe the area geology.

Local hydrogeologic information has been obtained through groundwater monitoring in the Sauget area. In the vicinity of Site P, shallow sand and gravel deposits close to the ground surface, yield significant quantities of water for nearby homes and business. Horizontal groundwater movement in the shallow deposits generally follow the land surface topography, with lateral movement toward local discharge zones (wells and small streams), and some movement into the deeper unconsolidated aquifers. Groundwater is encountered between 10 and 28 feet below the ground surface in the Dead Creek area. Under Site P, the aquifer of concern (AOC) is encountered at around 40 feet due to the build up of the landfill. Groundwater in the deeper unconsolidated valley fill deposits generally follows the bedrock surface. Accordingly, groundwater generally flows downstream through the sand and gravel aguifers in much the same direction as the original stream flow, but at a much slower rate.

Most area residents are supplied with drinking water by the Illinois-American Water Company (IAWC) which operates an intake on the Mississippi River upstream of Sauget. IAWC

sells the water to the various water departments and districts within the Sauget/Cahokia area. However, some area residents do obtain drinking water from shallow wells. Illinois Department of Public Health (IDPH) files and Illinois State Water Survey (ISWS) well logs indicate at least 50 area residents have wells which are used for drinking or irrigation. These wells are located in Cahokia (23), East St. Louis (5), East Carondelet (16) and Dupo (6). These do not include the wells at the homes on Judith Lane in Cahokia or an unknown number of residents in the Schmids Lake area (approximately 4.1 miles southwest) that are not covered by any public water distribution. The alluvial well at PT's Show Club, which draws water from the AOC, is monitored by the IDPH as a non-community well (serving over 25 people). 1983 report by the Southwestern Illinois Metropolitan and Regional Planning Commission (SIMRPC) listed 69 residences in Centreville Township (includes Sauget, Cahokia, Alorton and Centreville) which use private water systems. The same report lists 57 residences in East St. Louis and 365 residences in Sugarloaf Township (includes Dupo, North Dupo and East Carondelet). SIMRPC based their report on 1980 census data. Reference #4 contains a map which pin-points some of the ISWS well locations and a printout of area wells.

As noted previously, the **site** drainage is controlled by the railroad embankments. A 500-year levee protects the site from the rivers flood events. Any drainage that should

happen to runoff the site, would make its way to the Mississippi River via the American Bottoms Waste Water Treatment Plant (WWTP). A 15-mile surface water map is included in Section 3 of this report. The probable point of entry (PPE) is the American Bottoms outfall at river mile 178.2. The average discharge of the Mississippi River, as measured over a 128 year period at St. Louis, Missouri, is 179,800 cubic feet per second. The 15-mile surface water target limit extends to Mississippi River mile 163.2.

Surface water use in the immediate area (from Mississippi River mile 174 to 178) is limited to recreation and freight trafficking. There is an upstream surface water intake at river mile 181, which supplies most of the Illinois side area residents, was mentioned in a previous paragraph. The city of St. Louis is also supplied by an upstream surface water intake, about 12 miles north at river mile 190. At downstream river mile 149 (about 28 river miles south of area), the village of Crystal City, Missouri (population 4000) utilizes a Ranney well, adjacent the Mississippi River, for drinking water. A well of this kind, is assumed to draw in surface water due to its construction and location to the river. On the Illinois side, the nearest downstream surface water intake is located approximately 65 miles south of the area, at river mile 110. The intake is used by the town of Chester and surrounding communities in Randolf County.

According to the Illinois Department of Conservation (IDOC), the Resource Inventory for the Mississippi River at river miles 178-162 shows fishing areas, sport fishing areas, important wildlife habitat and bald eagle use at selected areas in this reach. Correspondence from IDOC details the aforementioned sensitive areas in Reference #6.

Although air samples and soil gas samples were not collected from Site P, the potential for an air release exists. As explained earlier in this report, the elevated HNu readings during the site reconnaissance, denote off-gassing of contaminated soil which could relate to a air release.

Access to the site is not controlled. There are no homes or schools that border the site.

It has been estimated that about 2000 people live within a mile Site P and about 148,000 people live within 4-miles, based on 1990 U.S. Census figures. The table on the following page shows the 4-mile radius population calculation. According to the Illinois Department of Commerce and Community Affairs (1988), approximately 3,200 people are employed within 2 miles of the site.

Target Population Calculation

	ulation Density/ tal Population	Area w/in 4- <u>Mile Radius</u>	Population w/in 4-Mile Radius
St. Louis	7,379/sq mi	11.5 sq mi	84,826
E. St. Louis	4,119/sq mi	8.5 sq mi	34,875
Alorton	2,237	100%	2,237
Cahokia	18,904	100%	18,904
Centreville	9,747	75%	7,310

Total Target Population = 148,152

A high priority has been assigned to this site. In order to quantitatively determine the threat posed by the former landfill, a CERCLA Screening Site Inspection should be conducted at PT's Show Club (Sauget/Monsanto Landfill or Site P) to more accurately assess the health risks and environmental threat posed by it.

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- U.S. Geological Survey, 1974, Monks Mound, IL. Quadrangle (225A), 1982, Granite City, IL-MO Quadrangle (225B), 1974, Cahokia, IL-MO. Quadrangle (225C), 1982, French Village, IL Quadrangle (225D), 7.5 Minute Series
- U.S. Department of the Interior. Fish and Wildlife Service, National Wetlands Inventory Maps: Monks Mound, IL. Quadrangle (225A), Granite City, IL-MO Quadrangle (225B), Cahokia, IL-MO Quadrangle (225C), French Village, IL. Quadrangle (225D).

SECTION 2

EPA FORM 2070-12

"Potential Hazardous Waste Site Preliminary Assessment"

⊕EPA	POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 1 - SITE INFORMATION AND ASSESSMENT 1. IDENTIFICATION 01 STATE OZ SITE MARKEN 1LD 984809293						
N. SITE NAME AND LOCATION							
O1 SITE NAME (Legal, common, or descriptive name of				. ,	PECIFIC LOCATION IDENT		
PT's Show Cl	ub		40	O MONS	anto Aver	<i>vue</i>	
03 CITY						1076	COUNTY OS CONO
Sauget 09 COORDINATES LATITUDE			1/2	62201	St. Clair		23 23
38 36 15.0	09010		Cah	okia, IL-	MO Quade	angle	zzsc)
	map sec	tion of 1		· ŧ			
M. RESPONSIBLE PARTIES	· · · · · · · · · · · · · · · · · · ·		Tax desired				
OT OWNER # MOUND BONK of Bel	leville, Illi	Nois	UK STREE	P. h.l.	Source		
Trust Property for	taul Jac	<u> </u>	OA STATE	05 ZIP CODE	C Square	FR	
Belleville	mugna Bani	T	11	62720	1618 234-0	020	
07 OPERATOR (It knows and different from exmed)				T Sharross, maline, road	1		
OB CITY			10 STATE	11 ZIP COOE	12 TELEPHONE NUMBER	ER	
13 TYPE OF OWNERSHIP (Check cont) S. A. PRIVATE (1) B. FEDE! (1) F. OTHER: 14 OWNER/OPERATOR NOTIFICATION ON FILE	■ A. PRIVATE □ B. FEDERAL: □ C. STATE □ D. COUNTY □ E. MUNICIPAL						
A. RCRA 3001 DATE RECEIVED:		B. UNCONTROL	LED WAST	E SITE (CEACLA 103 c	DATE RECEIVED:	MTH DAY YEAR	_ FI C NONE
IV. CHARACTERIZATION OF POTENT							
OF ON SITE INSPECTION S YES DATE NO NO NO NO NO NO NO NO NO N						ACTOR	
02 SITE STATUS (Check anal	22 SITE STATUS (Check and) OF VENUS OF OPERATION						
	C. UNKNOWN		BÉGINANG Y			CNOWN	
04 DESCRIPTION OF SUBSTANCES POSSIBLY							
Heavy metals, BTEX's, Chlorinated Solvents							
		(toxic	., persiste	int)		
05 DESCRIPTION OF POTENTIAL HAZAND TO E				·,			
Groundwater (population, environment) Air (population, environment)							
V. PRIORITY ASSESSMENT							
01 PRIORITY FOR INSPECTION (Check and, If high B. A. HIGH B. (Imposition required promptly)	or medium is checked, cost MEDIUM (hapocilon required)	D G. LOW	mation and Pr	C) D. NONE	dove Conditions and Incidents) r action needed, complete curre	nt disposition functi	
W MECHANICAL AVAILABLE FORM							

DLPC/RPMS

OS MEENCY

IEPA

03 TELEPHONE NUMBER

08 DATE 08/2,9/

07 TELEPHONE NUMBER

12171782-6760

Timothy J. Murphy
EPAFORM 2070-12(7-01)

04 PERSON RESPONSIBLE FOR ASSESSMENT

01 CONTACT

()

⊕EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

ILD 984809293

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II. WASTE ST	ATES, QUANTITIES, AN	D CHARACTERI	STICS				
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		NO OF DROMS	 	<u> </u>			
M. WASTE T							
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OLW	OILY WASTE						
SOL	SOLVENTS						· · · · · · · · · · · · · · · · · · ·
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occ	OTHER ORGANIC CH	TEMICALS	UNKNOWN				
ЮС	INORGANIC CHEMIC	ALS	≈ 25	12-15 gallong	(P255) r	emoved from	idf1
ACD	ACIOS						
BAS	BASES		117,000	cu yds	Edwin Coop	per fitter cal	40H11.22
MES	HEAVY METALS	<u> </u>			•		
IV. HAZARD	DUS SUBSTANCES 1500 A	spendu foi most trequen	ry cited CAS Numbers;				
01 CATEGORY	02 SUBSTANCE N	AME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD		05 CONCENTRATION	06 MEASURE OF CONCENTRATION
UNK	Monsonto ACL-8	5 Chlorine	UNKNOWN	landfilled		UNKNOWN	
	Composition"						Í
MES	lead .		N.A.	COMPCHEN	ts of	18.4	M9/K9
MES	cadmium		N.A.	Stilter cal	Ke	1.8	11
MES	ZINC		N.A.			7220	11
IDC	chosphorus pent	asulfide	1314803			UNKNOWN	
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V. FEEDSTO	CKS (See Appendix for CAS Mumb	•rs/	<u> </u>	L		<u> </u>	<u> </u>
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iepa i	Div. of Land Pollu	ition Contro	or the Lig	-3161000C			

⊕ EPA

POTENTIAL HAZARDOUS WASTE SITE

I. IDENTIFICATION OI STATE OZ SITE MAMBER
ILD 984809293

PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

II, HAZARDOUS CONDITIONS AND INCIDENTS	
01 TA. GROUNDWATER CONTAMINATION >25	02 DOBSERVED (DATE 5-26-97) POTENTIAL ALLEGED 04 NARRATIVE DESCRIPTION
pt's well on-site was fou	nd to contain chloroform-also found
in subsurface soil samp	les. Illinois-American Woter Co. Water
line runs through the	landfill.
01 B SURFACE WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED	02 (7 OBSERVED (DATE:) L. POTENTIAL ALLEGED 04 NARRATIVE DESCRIPTION
NONE documented or observe	rd.
01 TO C CONTAMINATION OF AIR 03 POPULATION POTENTIALLY AFFECTED:	02 C OBSERVED (DATE)
Soil off-gassing was docum	ented by IEMA during Site recommissance
5/26/91.	
01 6 D FIRE/EXPLOSIVE CONDITIONS 03 POPULATION POTENTIALLY AFFECTED:	02 (OBSERVED (DATE 1978-1979) [POTENTIAL
According to the site operator at	that time, Monsanto ACL filter residues
and packages would occasion	elly ignite when it come in contact with the
filter cake waste from Edwin	l Cooper,
01 B E. DIRECT CONTACT	02 C OBSERVED (DATE) POTENTIAL . ALLEGED
03 POPULATION POTENTIALLY AFFECTED.	built on-site, teachable slag and
	built on-site, teachable stug and
cinders used as cover	
O1 ME E CONTAMINATION OF SOIL A	02 - OBSERVED (DATE 2-12-87) POTENTIAL ALLEGED
01 M F. CONTAMINATION OF SOIL 20 03 AREA POTENTIALLY AFFECTED: Acres)	04 NARRATIVE DESCRIPTION
	metals found in on-site subsurface soil
	metals found in on-site subsurface soil in report.
samples which is summarized	
Samples which is summarized 01 # G. DRINKING WATER CONTAMINATION >25 03 POPULATION POTENTIALLY AFFECTED >25	OR OBSERVED (DATE 5-26-91) POTENTIAL ALLEGED
Samples which is summarized 01 & G. DRINKING WATER CONTAMINATION >25	OR OBSERVED (DATE 5-26-91) POTENTIAL ALLEGED
Samples which is summarized 01 to G. Drinking water contamination >25 03 POPULATION POTENTIALLY AFFECTED >25 See A. above 01 (1) H. WORKER EXPOSURE/INJURY	OZ (1) OBSERVED (DATE 5-26-91) POTENTIAL ALLEGED OZ (1) OBSERVED (DATE
OT IT H. WORKER EXPOSURE/INJURY O3 WORKERS POTENTIALLY AFFECTED: SER A. above	O2 © OBSERVED (DATE 5-26-9(_) POTENTIAL ALLEGED O4 NARRATIVE DESCRIPTION O2 [] OBSERVED (DATE
Samples which is summarized 01 to G. Drinking water contamination >25 03 POPULATION POTENTIALLY AFFECTED >25 See A. above 01 (1) H. WORKER EXPOSURE/INJURY	O2 © OBSERVED (DATE 5-26-91) POTENTIAL ALLEGED O4 NARRATIVE DESCRIPTION O2 [] OBSERVED (DATE
Samples which is summarized 01 & G. DRINKING WATER CONTAMINATION >25 03 POPULATION POTENTIALLY AFFECTED	O2 © OBSERVED (DATE 5-26-91) POTENTIAL ALLEGED O4 NARRATIVE DESCRIPTION O2 [] OBSERVED (DATE
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Samples which is summarized 01 & G. DRINKING WATER CONTAMINATION >25 03 POPULATION POTENTIALLY AFFECTED	O2 © OBSERVED (DATE 5-26-91) POTENTIAL ALLEGED O4 NARRATIVE DESCRIPTION O2 [] OBSERVED (DATE
Samples which is summarized 01 & G. DRINKING WATER CONTAMINATION >25 03 POPULATION POTENTIALLY AFFECTED	O2 @ OBSERVED (DATE 5-26-91) POTENTIAL ALLEGED O4 NARRATIVE DESCRIPTION O2 (1) OBSERVED (DATE

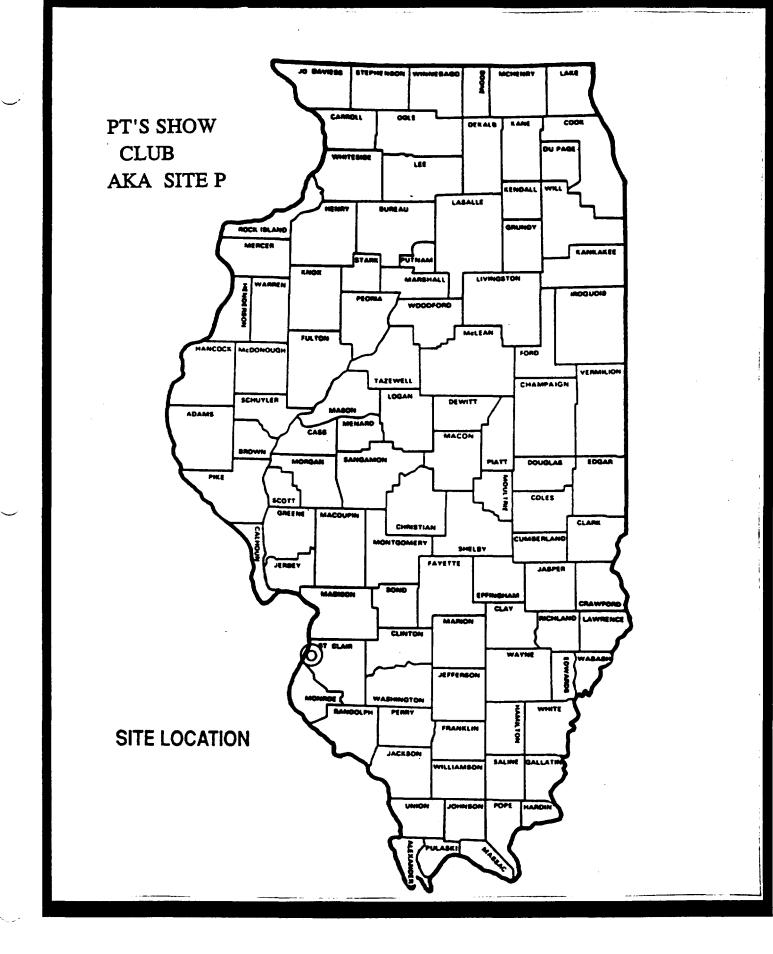
&FPA

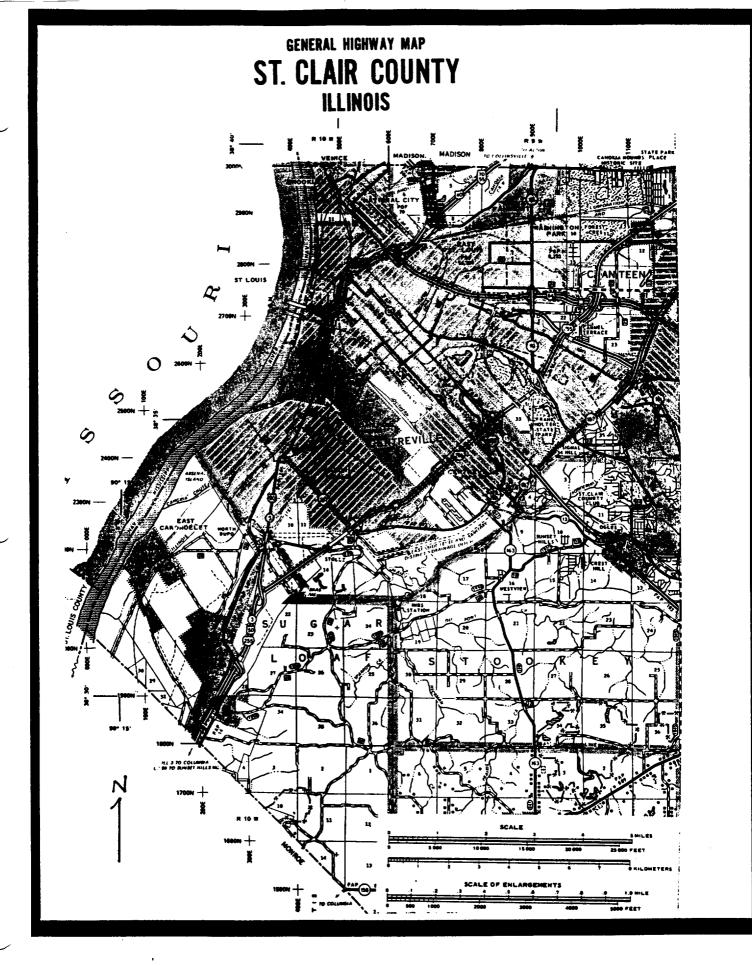
POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT

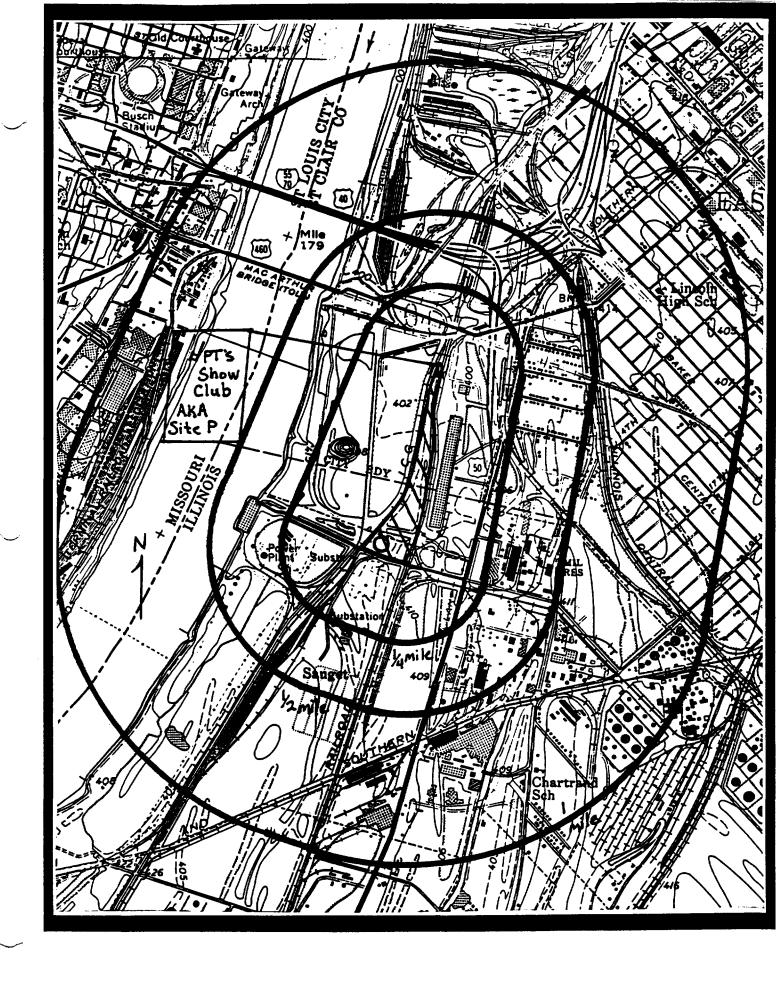
L IDENTIFICATION
OI STATE OF SITE NAMED ILD 98 4809.293

PART 3 - DESCRIPTION OF	FHAZARDOUS CONDITIONS AND INCIDENTS	(1 <u>CD 17</u> E	FOULARS
E. HAZARDOUS CONDITIONS AND INCIDENTS (Comment			
01 BJ. DAMAGE TO FLORA 04 NARRATIVE DESCRIPTION	02 OBSERVED (DATE: 12/77)	POTENTIAL	□ ALLEGED
Slag and cividers used as	daily and final cover whi	ch will No	e promote
of BJ. DAMAGE TO FLORA 04 NARRATNE DESCRIPTION Slag and cinders used as a good revegitation of	the' landtill		
01 K. DAMAGE TO FAUNA 04 NARRATIVE DESCRIPTION (Actuals Aumoria) of appenies	02 () OBSERVED (DATE:)	O POTENTIAL	☐ ALLEGED
None documented or obs	erved		
01 [] L. CONTAMINATION OF FOOD CHAIN 04 MARRATIVE DESCRIPTION	02 OBSERVED (DATE:)	D POTENTIAL	☐ ALLEGED
None documented or i	abserved		
01 M M UNSTABLE CONTARMENT OF WASTES	02 🗆 OBSERVED (DATE:)	D POTENTIAL	1 ALLEGED
03 POPULATION POTENTIALLY AFFECTED.	04 NARRATIVE DESCRIPTION		
See J. above			
01 (N. DAMAGE TO OFFSITE PROPERTY 04 NARRATIVE DESCRIPTION	02 Li OBSERVED (DATE:)	D POTENTIAL	□ ALLEGED
wave documented or	observed		
01 E. O. CONTAMINATION OF SEWERS, STORM DRAINS, W. 04 NARRATIVE DESCRIPTION	WTPs 02 (DATE:)	☐ POTENTIAL	□ ALLEGED
None documented or ob	served		
01 M P. ILLEGALAMAUTHORIZED DUMPING 04 NARRATIVE DESCRIPTION	02 OBSERVED (DATE: Dec. 1977)		□ ALLEGED ///
Montonto dumped 225 into 1841. also Monsanto was removed from the 18	containers of phosphorus pe ACL-85 Chlorine Composition FI by Monsonto	wosulfide w. The f	e (Hommabla) PZ 35
06 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR		*****	
III. TOTAL POPULATION POTENTIALLY AFFECTED:	>25		
IV. COMMENTS			
V. SOURCES OF INFORMATION (Cas associate retainment as, a. a.			
IEPA Div. of Land Pollution Co	outrol file L1631210002		

SECTION 3 MAPS



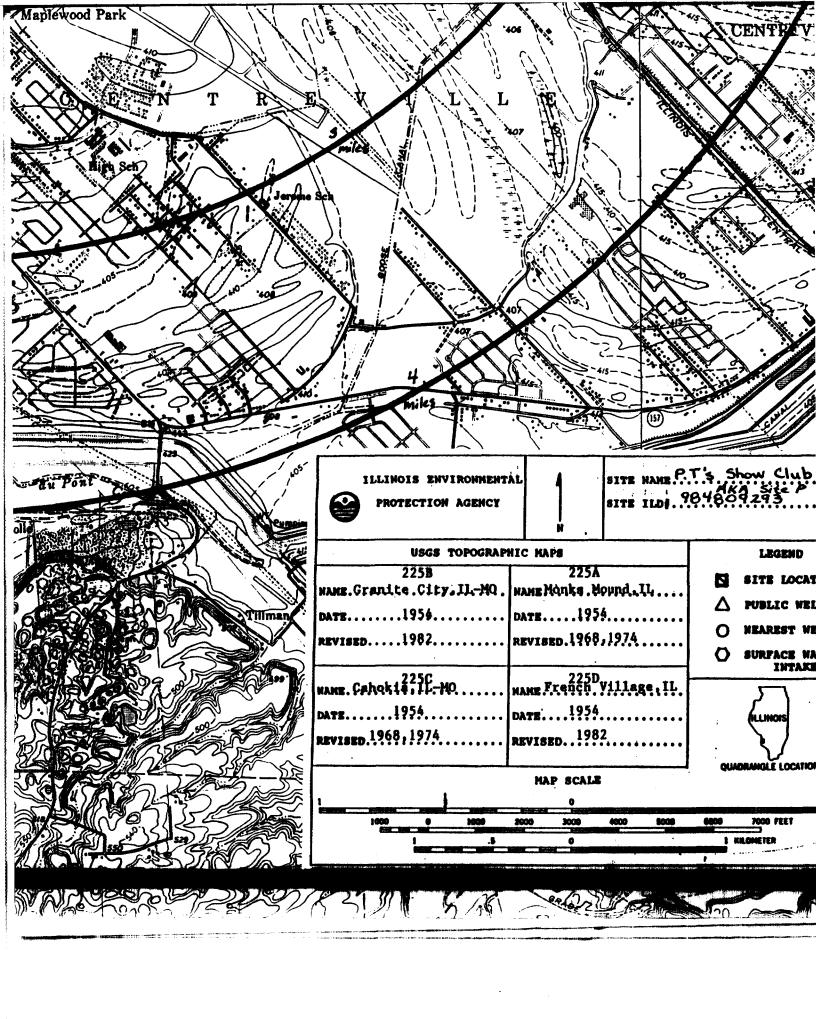


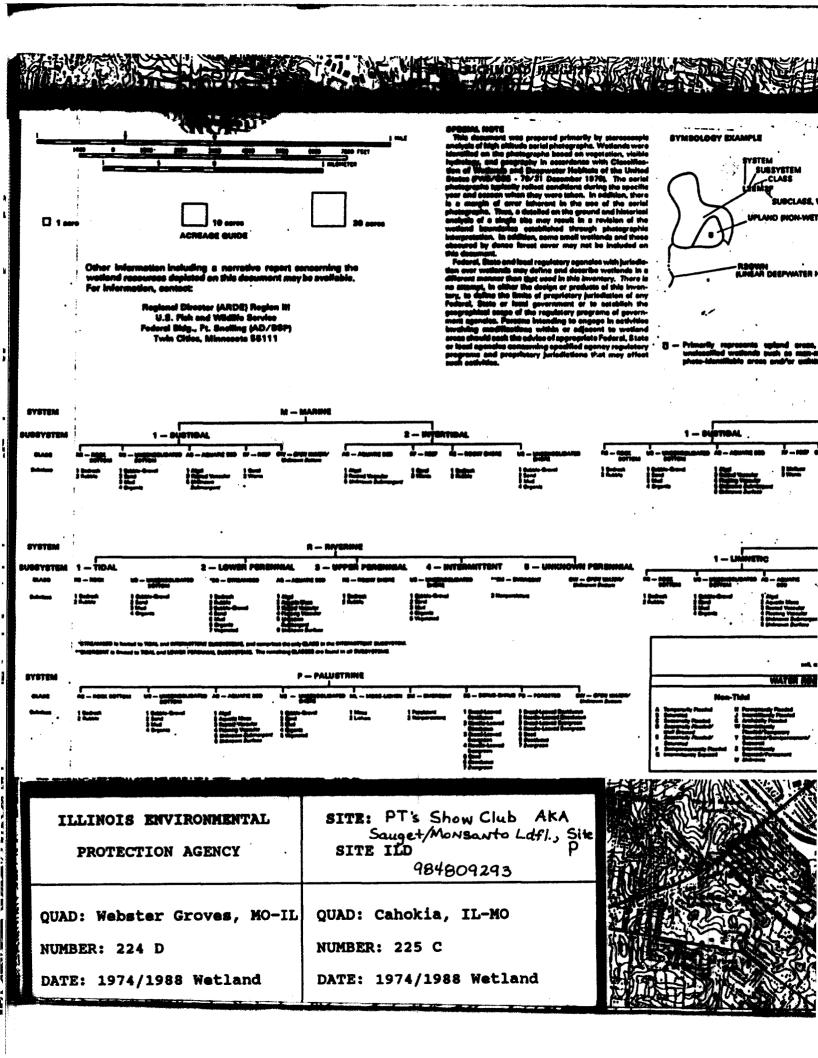


SDMS US EPA REGION V FORMAT- OVERSIZED - 5 IMAGERY INSERT FORM

The item(s) listed below are not available in SDMS. In order to view original document or document pages, contact the Superfund Records Center.

SITE NAME	SAUGET AREA 1			
DOC ID#	153498			
DESCRIPTION OF ITEM(S)	USGS TOPOGRAPHIC MAPS			
REASON WHY UNSCANNABLE	X_OVERSIZED ORFORMAT			
DATE OF ITEM(S)	1974/1988			
NO. OF ITEMS	2			
PHASE	SAS			
PRP	SAUGET AREA 1			
PHASE (AR DOCUMENTS ONLY)	Remedial Removal Deletion Docket AR Original Update # Volume of			
O.U.				
LOCATION	Box # Folder # Subsection			
COMMENT(S)				
PARTIAL COPY				



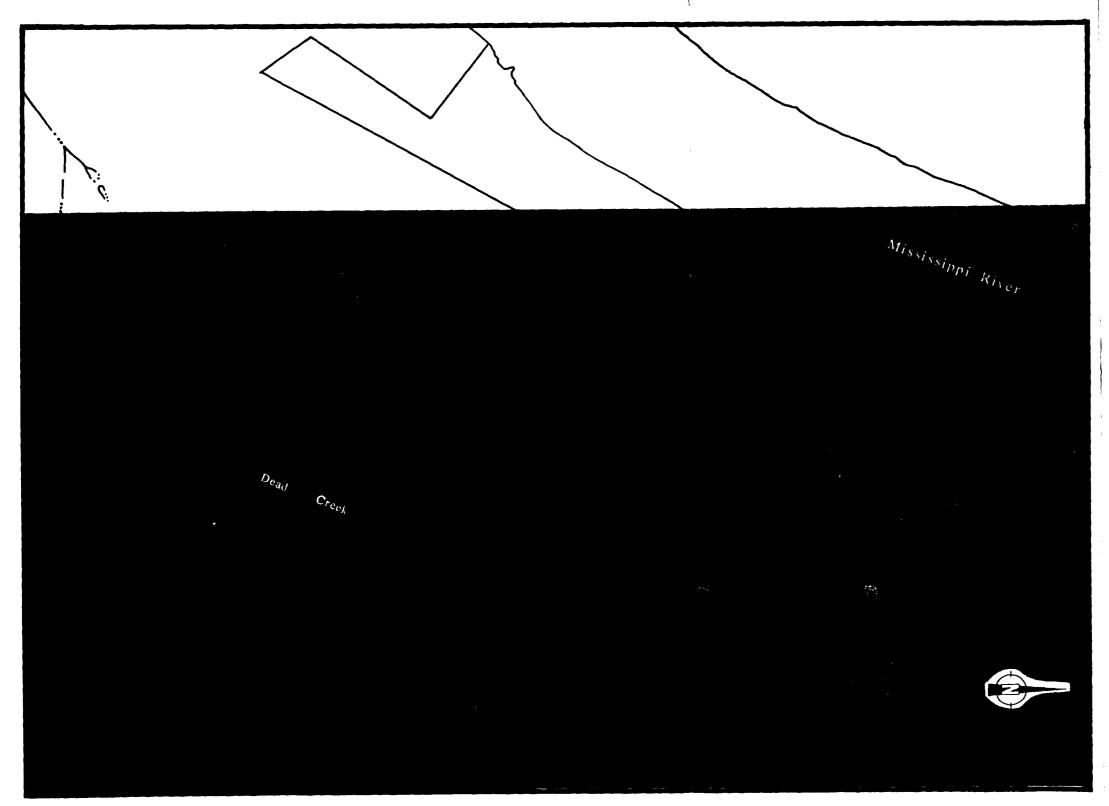


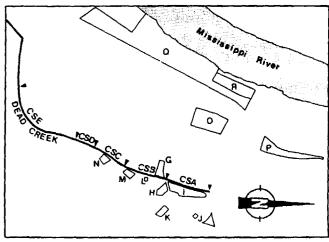
SECTION 4 PHOTOGRAPHS

SDMS US EPA REGION V FORMAT- OVERSIZED - 5 IMAGERY INSERT FORM

The item(s) listed below are not available in SDMS. In order to view original document or document pages, contact the Superfund Records Center.

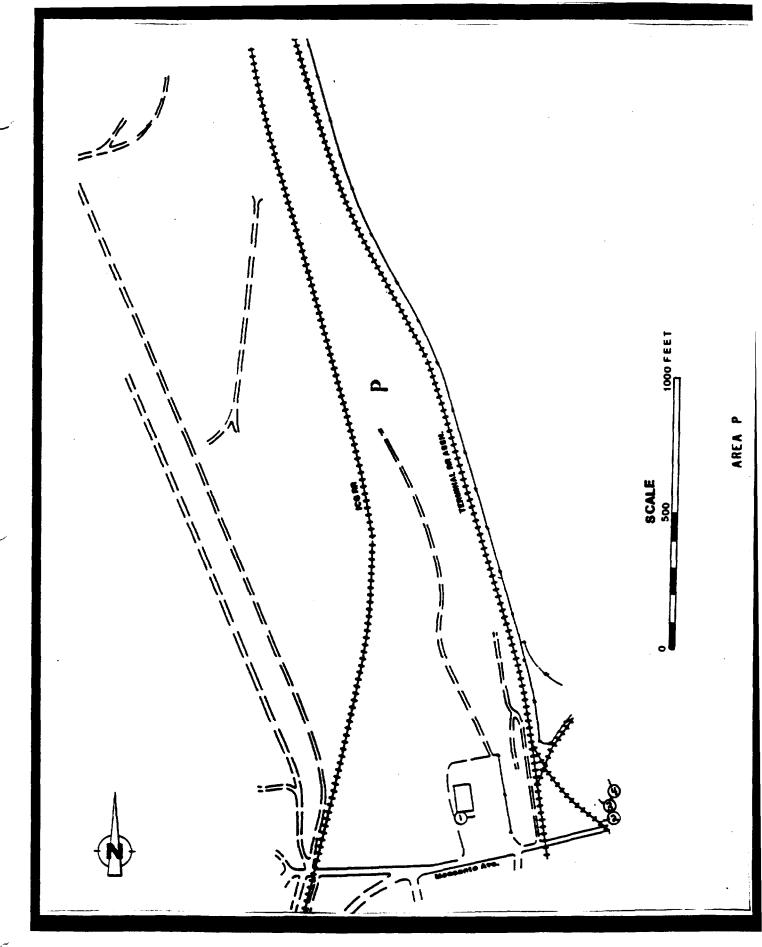
	···			
SITE NAME	SAUGET AREA 1			
DOC ID#	153498			
DESCRIPTION OF ITEM(S)	AERIAL PHOTOGR	APH/ IN	DIVIDUAL COLOR PHOTOS	
REASON WHY UNSCANNABLE	_X_OVERSIZED ORX_FORMAT			
DATE OF ITEM(S)				
NO. OF ITEMS	3			
PHASE	SAS			
PRP	SAUGET AREA 1			
PHASE (AR DOCUMENTS ONLY)			Deletion Docket AR of	
O.U.				
LOCATION	Box # Fo	lder#_	Subsection	
	COMMEN	Γ(S)		
	AERIAL M FIGURE			





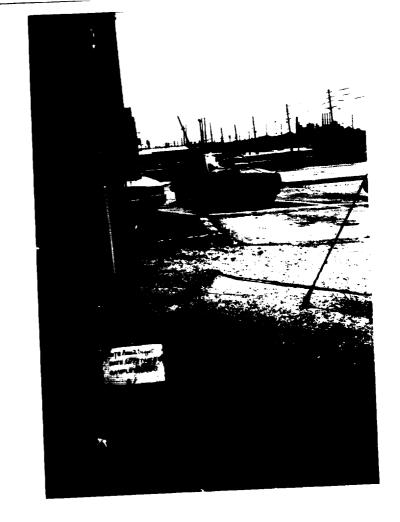
SITE LOCATION INDEX MAP

AERIAL PHOTOGRAPH OF DCP AREA - 1978



Photograph Location Map

DATE: June 27, 1991 TIME: 11:25 AM PHOTOGRAPH TAKEN BY:____ Kim Nika PHOTOGRAPH NUMBER: 1 LOCATION: PT's Show Club Monsanto Ave., Sauget, IL PICTURE TAKEN TOWARD: E COMMENTS: The spigot on the S. side of PT's Show Club where sample G201 was collected.



DATE: July 31, 1991 TIME: 1:30 PM PHOTOGRAPH TAKEN BY:____ Timothy J. Murphy PHOTOGRAPH NUMBER: 2 LOCATION: OZ Night Club parking lot, Monsanto Ave., Sauget, IL PICTURE TAKEN TOWARD: W COMMENTS: The southern part of the covered Sauget/Monsanto Landfill



DATE: July 31, 1991
TIME: 1:30 PM
PHOTOGRAPH TAKEN BY:
Timothy J. Murphy
PHOTOGRAPH NUMBER: 3
LOCATION: OZ Night Club
parking lot, Monsanto
Ave., Sauget, IL
PICTURE TAKEN TOWARD: NW
COMMENTS: The central
part of the covered
Sauget/Monsanto Landfill



DATE: July 31, 1991

TIME: 1:30 PM

PHOTOGRAPH TAKEN BY: ______

Timothy J. Murphy

PHOTOGRAPH NUMBER: 4

LOCATION: OZ Night Club

parking lot, Monsanto

Ave., Sauget, IL

PICTURE TAKEN TOWARD: N-NW

COMMENTS: The northern

part of the covered

Sauget/Monsanto Landfill,

left of the RR tracks.



SECTION 5 SUPPORTING DOCUMENTATION AND REFERENCES

Reference Number 1

		· '···································
Project Name Dead Creek		Boring/Well No. P-1
Project No. IL 3140		Location Site P
Date Prepared 2-11-87		Owner IEPA
Prepared by Tim Maley		Top of Inner Casing Elev. NA
		Drilling Firm Fox drilling
Depth (ft) Descrip	tion	Driller Jerry Hammon
		Start & Completion Dates 2/11, 2/11/87
		Type of Rig Mobile B-61
P - 1		
		Method of Drilling 3 3/4" I.D.
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	•	hollow stem augers
RESESSE		WELL DATA
<b>1888888</b>		
188888		Hole Diam. 8 in.
<del> </del>		Boring Depth 35.0 ft.
5-FXXXX	FILL	Casing and Screen Diam.
		Screen Interval
		screen rype
		Stickup
<b>TSSSSSSS</b>		Well Type
		Well Construction:
10-1888888		Filter Pack
<b>********</b>		Seal
- <del> </del>		Grout
		Lock No.
	BROWN AND GRAY	TEST DATA
15	SILTY CLAY	Static Water Elev Date
		Static Water Elev. Date
		Static Water Elev. Date Slug Test Yes No No
<del>-</del>	DARK GRAY SILT	Test Date
		Hydraulic Conductivity
20-		Other
		<del></del>
		WATER QUALITY
		<del>-</del>
25-		Samples Taken Yes No_X
-	BROWN FINE - MED	No. of Samples
		Types of Samples
	SAND	
30-		Date Sampled
		Samplers
		Samples Analyzed for
▼ 7		
35		Split Samples Yes No X
		Recipient
		Comments Subsurface soil samples
		from boring 0 - 10' and 25 - 35'
		analyzed for HSL compounds.
		remarks
•		Ground elev. 418.41
		310did 4241, 120,14
		<del></del>

---

Site Dead Creek Site-P	Boring/Well No.	P-1
	Boring/Weil No.	P-1

Sample Dept	h Blow Count	Description
		Crushed limestone on surface.
1 - 2.5	4-3-3	FILL consisting of black sandy CLAY with crushed limestone, slag gravel, coal, and cinders.
3.5 - 5	4-3-3	Same as above.
6 - 7.5	5-7-25/3	FILL consisting of various debris including paper and plastic products, slag gravel, asphalt, and silty clay. Large obstruction encountered $\theta$ 7.5'.
8.5 - 10	6-12-10	FILL consisting of brown silty CLAY with various debris including paper products, small gravel, and fine to coarse grain sand. Wet.
11 - 12.5	6-17-3	Same as above.
		FILL discontinues @ 13.5'
13.5 - 15	3-6-7	Dark brown-dark gray silty CLAY. Slightly mottled. Trace of very fine grain sand. Dry.
16 - 17.5	2-4-6	Same as above to 17'. 4" layer of gray fine grain sand @ 17-17 1/3'. Dry. Then dark gray SILT. Trace of very fine grain sand. Dry.
18.5 - 20	3~5~8	Dark gray very fine grain SAND. Trace of silt. 2" gray silty clay layer @ 19'. Then light gray fine to medium grain SAND. Dry.
21 - 22.5	6-10-12	Brown medium grain SAND. Trace of coarse grain sand and small gravel. Dry.
23.5 - 25	6-13-12	Same as above.
28.5 - 30	2-5-7	Same as above.
33.5 - 35	3-5-10	Same as above. Wet.
		E.O.B. @ 35'.

.

Project NameDead C	reek	Boring/Well No. P-2
Project No. IL 3140		Location Site P
Date Prepared 2-11-	87	Owner IEPA
Prepared by Tim Mal	•у	Top of Inner Casing Elev. NA
	<del></del>	Drilling Firm Fox drilling
Depth (ft)	Description	Driller Jerry Hammon
	•	Start & Completion Dates 2/11, 2/11/87
_		Type of Rig Mobile 8-61
p -	2	Method of Drilling 3 3/4" I.D.
0	_	hollow stem augers
• • • • • • • • • • • • • • • • • • •	<b>√√√√√√√</b>	HOLLOW SCOR Edders
<b>-1</b>	<b>***********</b>	WELL DATA
7()()()()	YYYYYYY <b>I</b>	Hole Diam. 8 in.
<b>78</b>	YYYYYYYY	Boring Depth 40.0 ft.
₅╣үүүүүүүү	YYYYYYY	Casing and Screen Diam.
<b>-X</b> XXXXXXXXXXXXXX	XYXXYYYY <b>I</b>	Screen Interval
-{XXXXXXXXXXX	XXXXXXX	Screen Type
_ <b>K</b> XXXXXXXX	XXXXXXX <b>X</b>	Stickup
	XXXXXXXX	Well Type
10 TKXXXXXXXXX	(XXXXXXX) FILL	Well Construction:
10-100000000000000000000000000000000000	XXXXXXXI	Filter Pack
7(XXXXXXXX)	(XXXXXX.I	Seel
1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<b>XXXXXXX</b>	Grout
₹₩₩₩₩	WWW.I	Lock No.
15—	<b>**********</b>	TEST DATA
<b>-</b> KXXXXXXXXXXX	(XXXXXXX)	Static Water Elev. Date Static Water Elev. Date
<b></b>	XXXXXXXX	Static Water Elev Date
<b>-K</b> XXXXXXXXXX	(XXXXXXX)	Slug Test Yes No
<b>- XXXXXXXXXX</b>	XXXXXXXI	Test Date
20-1	KXXXXXX	Hydraulic Conductivity
	XXXXXXXI	Other
<b>A</b> AAAAAAAA	.XXXXXXX <b>XI</b>	· · · · · · · · · · · · · · · · · · ·
7	<b>****************</b>	
<b>1</b> ////////	<b>////////</b>	WATER QUALITY
25-1	<b>YYYYYYYI</b>	WAIRE GORDIII
<b>25 K</b> XXXXXXXXXXXXXXXX	(XXXXXXXX)	Samples Taken Yes No X
עגגגגגגגגגד <i>ב</i>	XXXXXXXI	Samples Taken Yes No X No. of Samples
<b>I</b>	(XXXXXXX)	Types of Samples
<b>–</b> 30–		Date Sampled
		Samplers
	BROWN	Samples Analyzed for
_	FINE - MED	
	SAND	
35—		Split Samples Yes No X
		Split Samples Yes No X Recipient
-		
		Comments
-		
40		
		REMARKS
		Ground elev. 423.62

Site Dead Creek Site-P Boring/Well No. P-2
--------------------------------------------

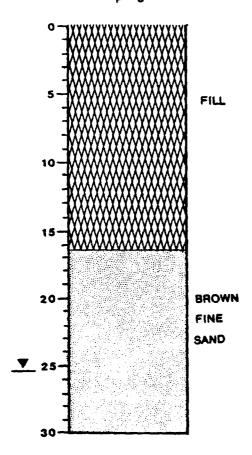
Sample Depth B	Blow Count	Description
	1	Crushed limestone on surface.
1 - 2.5	6-6-7	FILL consisting of black-brown sandy CLAY with various debris including paper and plastic products, wood chips, slag, small gravel, fine to coarse grain sands, and brick fragments. Dry.
3.5 - 5	3-3-7	Same as above.
5 - 7.5	3-4-4	Same as above.
1.5 - 10	2-6-6	Same as above.
11 - 12.5	5-5-7	Same as above.
13.5 - 15	7-7-8	Same as above.
16 - 17.5	4-3-14	Same as above. Moist.
18.5 - 20	6-6-8	Same as above.
21 - 22.5	6 - 50/3	Same as above. Spoon refusal.
23.5 - 25   1	10-6-28	Same as above. Poor recovery.
26 - 27.5	3-5-5	No recovery. Probably same as above.
		FILL apparently discontinues @ 28'.
28.5 - 30	6-9-12	Dark gray fine to medium grain SAND. Moist.
33.5 - 35	7-11-10	Brown medium grain SAND. Wet.
38.5 - 40	7-12-14	Dense brown fine to medium SAND. Wet.
	}	E.O.B. @ 40'.

Project Name	Dead Creek
Project No.	IL 3140
Date Prepared	2-11-87
Prepared by	Tim Maley

Depth (ft)

Description

3 -- 3



Boring/Well No. P-3
Location Site P
Owner ITPA
Top of Inner Casing Elev. NA
Drilling Firm Fox drilling Driller Jerry Hammon Start & Completion Dates 2/11, 2/11/87
Driller Jerry Hammon
Start & Completion Dates 2/11, 2/11/87
Type of Rig Mobile B-61
Method of Drilling 3 3/4" I.D.
hollow stem augers
WELL DATA
Hole Diam. 8 in. Boring Depth 30.0 ft. Casing and Screen Diam.
Boring Depth 30.0 ft.
Screen Interval
Screen Type
Stickup
Well Type
Well Construction:
#216 au mails
Seal
Seal Grout
•1
LOCK NO.
TEST DATA
Static Water Elev Date
Static Water Elev. Date
Static Water Elev. Date Static Water Elev. Date Slug Test Yes No
TACT DATA
Hydraulic Conductivity
njaradite conductivity
Other
Other
Other
Other
MATER QUALITY
WATER QUALITY Samples Taken Ves No. X
WATER QUALITY Samples Taken Ves No. X
WATER QUALITY Samples Taken Ves No. X
MATER QUALITY
Samples Taken Yes No X No. of Samples Types of Samples
MATER QUALITY  Samples Taken Yes No X  No. of Samples  Types of Samples  Date Sampled
MATER QUALITY  Samples Taken Yes No X  No. of Samples  Types of Samples  Date Sampled
Samples Taken Yes No X No. of Samples Types of Samples  Date Sampled
MATER QUALITY  Samples Taken Yes No X  No. of Samples  Types of Samples  Date Sampled
MATER QUALITY  Samples Taken Yes No X  No. of Samples  Types of Samples  Date Sampled
Samples Taken Yes No X No. of Samples Types of Samples  Date Sampled Samplers Samples Analyzed for
Samples Taken Yes No X  No. of Samples Types of Samples  Date Sampled Samplers Samples Analyzed for  Split Samples Yes No X
Samples Taken Yes No X No. of Samples Types of Samples  Date Sampled Samplers Samples Analyzed for
MATER QUALITY  Samples Taken Yes No X No. of Samples Types of Samples  Date Sampled Samplers Samplers Analyzed for  Split Samples Yes No X Recipient
Samples Taken Yes No X  No. of Samples Types of Samples  Date Sampled Samplers Samples Analyzed for  Split Samples Yes No X
MATER QUALITY  Samples Taken Yes No X No. of Samples Types of Samples  Date Sampled Samplers Samplers Analyzed for  Split Samples Yes No X Recipient
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MATER QUALITY  Samples Taken Yes No X No. of Samples Types of Samples  Date Sampled Samplers Samplers Analyzed for  Split Samples Yes No X Recipient  Comments
MATER QUALITY  Samples Taken Yes No X No. of Samples Types of Samples  Date Sampled Samplers Samplers Analyzed for  Split Samples Yes No X Recipient  Comments

Site Dead C	reek Site-P	Boring/Well No. P-3
Sample Depth	Blow Count	Description
		Black cinder fill on surface.
1 - 2.5	7-9-12	FILL consisting of black and brown sandy clay with various debris material including paper products, wood chips, cloth, tin, rubber, slag, cinders, crushed limestone, an off-white crystalline substance, hay, and fine to coarse grain sand. Dry.
3.5 - 5	3-3-30/6	FILL - same as above.
6 - 7.5	3-3-6	FILL - same as above.
8.5 - 10	6-18-33	FILL - same as above.
11 - 12.5	12-12-13	FILL - poor recovery. Strong moth ball (naphalene) odor.
13.5 - 15	5-7-15	No recovery.
16 - 17.5	6-17-17	FILL - same as above.
		Fill discontinues @ approx. 16.5'.
		Gray silty very fine grain SAND. Dry.
18.5 - 20	5~7~9	Brown fine grain SAND. Dry.
21 - 22.5	4-6-9	Same as above.
23.5 - 25	3-3-5	Same as above. Moist.
26 - 27.5	4-10-8	Same as above. Wet.
28.5 - 30	5-9-11	Same as above. Wet.
		E.O.B. @ 30'

_

 
 Project Name
 Dead Creek

 Project No.
 IL 3140

 Date Prepared
 2-12-87

 Prepared by
 Tim Maley
 Boring/Well No. Location Site P
Owner IEPA
Top of Inner Casing Elev. NA Drilling Firm Fox drilling
Driller Jerry Hammon
Start & Completion Dates 2/12, 2/12/87 Depth (ft) Description Type of Rig Mobile B-61 Method of Drilling 3 3/4" I.D. hollow stem augers WELL DATA Hole Diam. 8 in.
Boring Depth 35.0 ft.
Casing and Screen Diam. Screen Interval _ Screen Type Stickup Well Type Well Construction: Filter Pack FILL Seal Grout Lock No. TEST DATA Static Water Elev. __ _ Date Static Water Elev. Slug Test Test Date Hydraulic Conductivity Other WATER QUALITY Samples Taken No X Yes_ No. of Samples Types of Samples BROWN FINE - MED 30 Date Sampled Samplers SAND Samples Analyzed for 35 Split Samples Recipient Comments Subsurface soil samples from boring 0 - 10' and 25 - 35' analyzed for HSL compounds. REMARKS Slight organic odor. Ground elev. 424.65

Site	Dead	Creek	Site-P	

Boring/Well Ho. P-4

Sample Depth	Blow Count	Description
		Fill material on surface.
1 - 2.5	3-3-5	FILL consisting of dark brown-black silty clay; some crushed limestone, small gravel, and fine to medium grain sand.
3.5 - 5	4-9-8	FILL - same as above with more debris material including paper products and wood chips.
6 - 7.5	3-4-6	FILL - same as above.
8.5 - 10	5-7-22	FILL - same as above.
11 - 12.5	6-7-7	FILL - poor recovery.
13.5 - 15	2-9-5	No recovery.
16 - 17.5	7-14-19	FILL consisting of brown silty CLAY. Some medium-coarse grain sand and small gravel. Trace of a pale yellow solid (hard and brittle) substance. Dry.
18.5 - 20	2-10-2	FILL - same as.above. Trace of paper products and wood chips.
21 - 22.5	13-27-17	FILL - same as above with additional debris including asphalt, slag, crushed limestone, wire, and gravel.
23.5 - 25	4-6-8	FILL - same as above.
		Fill discontinues at approx. 26'.
26 - 27.5	3-4-4	Brown fine grain SAND. Trace of silt. Moist.
28.5 - 30	5-10-10	Same as above. Wet.
31 - 32.5	3-6-10	Brown fine to medium grain SAND. Wet.
33.5 - 35	5-10-13	Same as above. Trace of coarse grain sand. Wet.
ļ		E.O.B. @ 35'

roject Name Dead Creek roject No. IL 3140		Boring/Well No. P-5
roject No. IL 3140		Location Site P
ate Prepared 2-12-87		Owner IEPA
repared by Tim Maley		Top of Inner Casing Elev. NA
		Drilling Firm Fox drilling
epth (ft) Des	cription	Driller Jerry Hammon
		Start & Completion Dates 2/12, 2/12/8
		Type of Rig Mobile B-61
P - 5		
		Method of Drilling 3 3/4" I.D.
		hollow stem augers
⁰ ¬ <b>/</b> ///////////////////////////////////	<b>^^</b>	
₹₩₩₩₩₩₩	₩ <b>I</b>	WELL DATA
<b>-1</b> ////////////////////////////////////	<b>WI</b>	
<b>-!</b>	WI .	Hole Diam. 8 in.
_1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<b>~~~</b>	Boring Depth 35.0 ft.
<b>!</b> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	₩.	Casing and Screen Diam.
• <b>~</b>	₩ <b>i</b>	Screen Interval
7	W4	Screen Type
<b>-1</b> ∕∕∕∕∕∕∕∕∕∕∕∕∕∕∕	₩ <b>!</b>	Stickup
<b>-}</b> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<b>₩</b>	Well Type
4	₩ <b>.</b>	Well Construction:
10-100000000000000000000000000000000000	XX FILL	Filter Pack
•••••••••••••••••••••••••••••••••••••••	<del>W.I</del>	Seel
7	<b>XXI</b>	Seal Grout
1	AAAI	Grout Lock No.
<b>-R</b> AAAAAAAAAAAAAA	<b>XXI</b>	
	XXXII	TEST DATA
#\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	XXI	1401 Dain
15-1, , , , , , , , , , , , , , , , , , ,	XXII	Static Water Flag Date
<b>-#</b>	XX <b>1</b>	Static Water Elev. Date
<b>-1</b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	XXXI	Static Water Elev. Date No No
<del>-1</del> 0.00.00.00.00.00.00.00.00.00.00.00.00.0	XXI	Test Date
-1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	WA!	Hydraulic Conductivity
20-1////////////////////////////////////	<b>XX</b>	nydradic conductivity
	W.	Other
74.44.44.44.44.44.44.44.44.44.44.44.44.4	<b>XXI</b>	
1	WI .	
\$150 STATE OF THE PARTY OF THE	1000	WARRANT TER
<b>-</b>		WATER QUALITY
25-	6666 6466	Samples Taken Yes No X
		No of Samiles
		No. of Samples Types of Samples
	BROWN	- I Jess of Samples
7	FINE - MED	
-		Date Sampled
30-	SAND	
-		Samplers Samples Analyzed for
		Samples Millyred for
		Split Samples Yes No X
35	15401	Recipient Recipient
		Comments Subsurface soil samples
		from boring 10 - 25' analyzed for
		HSL compounds.
		nan compounds.
		<del></del>
		REMARKS
		Slight organic odor
		Ground elev. 422.98

**~**-

Site Dead Creek Site-P	Boring/Well No. P-5

Sample Dept	h Blow Coun	t Description
······································		Grass field area on surface.
1 - 2.5	4-5-7	FILL consisting of loose brown-black silty clay with crushed limestone, brick fragments, sand, and small gravel. Dry.
3.5 - 5	4-3-4	PILL - same as above with slag and cinder material.
6 - 7.5	1-2-1	PILL - same as above.
8.5 - 10	1-1-2	FILL consisting of brown-red silty clay. Mottled. Some medium grain sand and small gravel.
11 - 12.5	2-2-2	FILL consisting of brown silty CLAY.
13.5 - 15	1-1-2	PILL - same as above.
16 - 17.5	1-1-1	FILL consisting of brown silty CLAY. Trace of fine grain sand. Moist.
18.5 - 20	1-1-4	FILL - same as above. Trace of small gravel and asphalt.
21 - 22.5	1-2-3	FILL - same as above. Mottled.
		Fill discontinues @ approx. 23'.
23.5 - 25	2-4-7	Light brown fine to medium SAND. Dry.
26 - 27.5	2-4-6	Light brown fine to medium grain SAND. Trace of silt. Dry.
28.5 - 30	2-4-5	Brown fine grain SAND. Wet.
31 - 32.5	6-7-8	Same as above. Trace of coarse grain sand. Wet.
33.5 - 35	7-11-13	Same as above. Trace of coarse grain sand and small gravel. Wet.

E.O.B. @ 35'

Reference Number 2

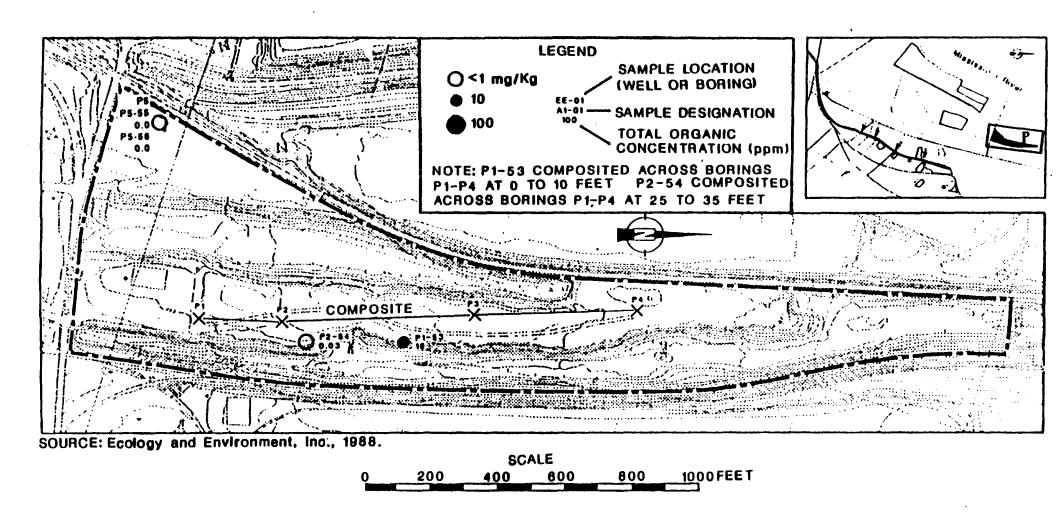


FIGURE 4-46 TOTAL ORGANIC CONCENTRATIONS IN SUBSURFACE SOILS AT SITE P

Table 4-19 SUMMARY OF SUBSURFACE SOIL SAMPLE RESULTS FOR SITE P

Chemical Name	Number of Times Detected*	Highest Concentration  Detected (mg/kg)	Sample Containing Highest Concentration
Folatile Organics			
othylbenzene	1	0.12	P1-53
coluene	1	0.41	P1-53
chloroform	1	0.01	P1-53
pensene	1	0.05	P1-53
-methyl-2-pentanone	2	0.05	P1-53
hlorobenzene	1	0.14	P1-53
ylenes	1	0.45	P1-53
exanone	2	0.05	P1-53
emivolatile Organics			
,4-dichlorobenzene	1	8.9J	P1-53
,2-dichlorobenzene	1	3.6J	P1-53
oheno l	1	3.9J	P1-53

None detected.

^{*} A total of 4 subsurface soil samples were collected from Site P. The numbers listed represent the number of samples, of the total of 4, in which each compound was detected.

J Estimated value. Result is greater than zero, but less than specified detection limit. Source: Ecology and Environment, Inc. 1988.

## Explanation For Analytical Data Summary Tables

All ground water results in ug/l.

All soil/sediment organic results in ug/kg

All soil/ sediment inorganic results in mg/kg

For sample location headings, the following qualifiers are used :

- + Denotes blank samples.
- * Denotes duplicate samples.
- Denotes that sample was not analyzed for the compounds listed.

For chemical results, the folling qualifiers are used :

- B Compound detected in blank samples.
- J Estimated value. Result is less than the specified detection limit, but greater than zero.
- E Estimated value. Concentration detected exceeds the calibrated range.
- C Result confirmed by GC/MS.
- * Duplicate analysis not with in control limits.
- R Spike sample recovery not with in control limits.

T	SITE	SITE J	SITE J	ELLE K	SITEK	SITEK	UL RAIK	SITE	SITE L	SITE C	SITE L	SITE L	SITE N	SITEN	PLANK	SITEP
	SAMPLE MUMBER SAMPLE DEPTH DATE SAMPLED	DC-J2-12 15'-25' 12-17-86	BC-J3-13 0-10' 12-17-86	0C-K1-08 0-10' 12-16-87	DC-K2-25 0-10' 1-12-87	DC-K3-32	DC-LB-01 +	DC-L1-02 5'-10' 12-12-86	DC-L2-03 5'-15' 12-12-86	DC-L3-04 5'-15' 12-12-86	DE-L4-09 10'-20' 12-17-86	BC-L4-10 \$ 10'-20' 12-17-86	DC-N1-05 0-10* 12-15-86	DC-N2-06	DC-NB-07 +	DC-P1-53 0-10* 2-11-67
. ]	5111C 511111 CE5	11 1, 00	11 17 00		• •• •/			11 11 00		11 11 00	11 17 00	11 17 00	11 10 00	11 10 00		
	1 Chloromethane				*											i
	2 Browomethane															
	3 Vinyl Chloride															
1	4 Chloroethane															
	5 Methylene Chloride	372 RJ			13 P	9 B	17 B	14 B	141 B	2278 B	9	5 J	4 BJ		4 BJ	
	6 Acetone	4487 B	467 BE	212 B	44 P	1003 EB	32 B	907 B	447 B	4557 B	32 B	81 8	45 9	11 GJ	23 9	1025
•	7 Carbon Bisulfide														•	
,	8 1,1-Dichloroethene															
.' '	9 1,1-Dichloroethane															
. 1/	O trans-1,2-Dichloroethene															
. 1	1 Chloroform									20253	96	49				13
. I'	2 1-2-Dichloroethane															1
1	3 2-Butanone (MEK)	6026 B		25 ₽	29 B	29 8	*** ** .	16		10000 8	16 B			14 J		168
1	4 1,1,1-Trichloroethane															
	5 Carbon Tetrachloride															
_	6 Vinyl Acetate															i i
	7 Dromodichtoromethane															. \
	8 1,2-Dichloropropane															\ \
	9 trans-1,3-Bichloropropene											•				
	O Trichloroethene															1
	l Dibromochloromethane															
																1
	2 1,1,2-Trichloroethane															
	3 Penzene								141	4177	7 J	4 J				49
	4 cis-1,3-Dichloropropene															
	5 2-Chloroethyl Vinyl Ether	· · · ·														
	6 Brosofors															
	7 4-Methyl-2-pentanone		4.3	11 J				8 7	167		68 B	49 \$	4 3			49
	8 2-Hexanone															38
.] 2	9 Tetrachloroethene															
.! 3	0 1,1,2,2-Tetrachloroethane															
	1 Toluene			15			-		2177	26582	93	20				413
3	2 Chlorobenzene															138
	3 Ethylbenzene	2051							40 J							119
	4 Styrene															• • • • • • • • • • • • • • • • • • • •
	5 Total Kylenes	7347							179	670 J						450
١, ٥	S INIBI MIJENES	7 7 7 1														

_(	T	SITE	SITE P	SITEP	SITE P	SITE O	SITE U	SITE U	SITE O	SITE O	SITE 0	PLANK	SITE O	SITE O	SITE U	SITE 0	SITE O
2,		SAMPLE MUMBER	BC-P2-54	DC-P5-55	BC-P5-56 B	DC-01-59 15'-25'	DC-D2-60 201-301	DC-03-61	DC-04-62 0-10*	DC-05-63 8.51-201	DC-05-64 # B.5'-20'	DC-08-65 +	DC-06-66 15'-25'	DC-09-72 0-10*	DC-09-73 151-291	DC-010-74 5'-10'	DC-010-75
		SAMPLE DEPTH DATE SAMPLED	25' -35' 2-11-97	10'-25 2-12-87	10'-25' 2-12- <b>8</b> 7	15 -25 2-16-97	20 -30 2-17- <b>8</b> 7	2-17-07	2-17-87	2-17-87	2-17-87	2-10-07	2-18-87	2-26-67	2-26-97	2-26-67	2-15-87
,		I Chloromethane	~														-
	<u>.</u> ]	2 Bromomethane 3 Vinyl Chloride															
		4 Chloroethane															
	·i	5 Hethylene Chloride	3 RJ				35 9103 <b>f</b> e	16 J	833 kJ 7692 k		18 J 11463 BE	139 P	4 J 457 B	870 HJ	519 A. 2591 A		1 141 F3 2514 B
112	al Line in the second	6 Acetone 7 Carbon Disulfide	1034 BE	333 BE	413 FE	1779 146	ATO DE	4405 RE	7672 W	8659 <b>PE</b>	11903 PC		437 6		27.7. 1	7 7001	. 714 8
		8 1.1-Dichloroethene															
		9 1,1-Bichloroethane					10 1										
11	n,	10 trans-1,2-Dichloroethene					192	6 J									
		11 Chloroform 12 1-2-Dichloroethane					23										
\ \{\\\.	ⁿ t	13 2-Butanone (MEK)	76 8	. 22 B	26 B	30 B	23641 BE	36 B	7179 B	244 8	171 B		20 9		4444 B	7436 B	6705 B
	`i	14 1.1.1-Trichloroethane				•••	*****		1410								
, e		15 Carbon Tetrachloride															
- JA	·1	16 Vinyl Acetate															
		17 Bromodichloromethane 18 1,2-Dichloropropane															
j.,	4	19 trans-1.3-Dichloroprobend						<del></del>							· · · · •		
	٠,	20 Trichloroethene					69										
_  ·	,	21 Dibromochloromethane															
120	"	22 1.1,7-Tricklorgethane					667	24	30769	•	19 J				•	1795	
	1	23 Benzene 24 cis-1,3-Dichloropropene					007	47	30/61		10 3					1/73	
	`\	75 2-Chlöroethyl Vinyl Ether	, · · - · · · · · · · · · · · · · · · ·														- 1
	2	26 Brossform					•										
J,	₹.	27 4-Methyl-2-pentanone	29 B				1244 B		7692								
_ [•	4	78 2-Hexamone 29 Tetrach)proethene	2 BJ				63										•
	i	30 1.1.2.2-Tetrachloroethan	•				28										
!"	ent Lancaria da Ca	31 Toluene	•				••		29487					293 J		4339	
	, į	32 Chlorobenzene					1667	62	38462	74	159			841 J		59974	1250
	:"	33 Ethylbenzene					46	167	166667 E	37 J	57 J			2439	74 J	9103	341 J
اما احد	^	34 Styrene					141	976	615385 E	244	256			21951	235 J	29487	1114 J
4	]	35 Total Nylenes					171	7/6	913323 F	277	236			71151	237 3	4770/	1114 7

## Subsurface Soils Semivolatiles

	SITE									<b></b>					
	SAMPLE MUMBER	DC-N1-05	DC-N2-06	DC-ND-07 +	DC-P1-53	DC-P2-54	DC-P5-55	DC-P5-56 \$	DC-01-59	DC-02-60	DC-03-61	DC-04-62	DC-05-63	DC-05-64 \$	DC-08-6
	SAMPLE BEPTH	0-10.	5'-15'		0-10'	25, -32,	10*-25	10"-25"	15"-25"	5030.	10'-20'	0-10.	8.51-201	8.51-201	
	DATE SAMPLED	12-15-96	12-15-86	12-16-86	2-11-87	2-11-87	2-12-67	2-12-87	2-16-87	2-17-07	2-17-87	2-17-87	2-17-87	2-17-87	2-18-8
	Phenol =				3875 J										
	bis(2-Chloroethyl)ether														
	2-Chlorophenol														
	1,3-Dichlorobenzene		-				** * * * * *								
	1,4-Dichlorobenzene				8875 J										
	Benzyl Alcohol														
	1,2-Dichlorobenzene				3623 J			•				24359 J			
	2-Methylphenol														
	bis(2-Chloroisopropyl) ether 4-Methylphenol														
	Hexachloroethane														
	. Hitrobenzene														
	Isophorone				*										
	2-Nitrophenol														
	7,4-Disethylphenol														
	Benzoic Acid														
	bis-(2-Chloroethoxy)methane														
	7 2,4-Bichlorophenol						. <b>-</b>								
	1,2,4-Trichlorobenzene											26923 J			
21	Naphthalene					•						34615 J			
	7 4-Chloroaniline														-
	Hexachlorobutadiene													•	
	l 4-Chloro-3-methylphenol														
	7-Methylnaphthálene		**************************************									160256			
	Hexachtorocyclopentadiene														
	2,4,6-Trichlorophenol														
	1 2,4,5-Trichlorophenol						• ••								•
	2-Chloronaphthalene														
30	2-Mitroaniline														
		TO STORY A TO THE REPORT													
								•							

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## Subsurface Soils Semivolatiles

<u>.</u> []-		SITE	SITE N	EITE N	BLANK	SITE P	SITE P	TITE P	SITEP	SITE O	SITE O	SITE D	SITE O	SITE O	SITE 0	" PLANK
<b>D</b>  2		SAMPLE NUMBER	BC-N1-05	DC-N2-06	BC-NB-07 +	DC-P1-53	DC-P2-54	DC-P5-55	9C-P5-56 ¢	DC-01-59	DC-02-60	DC-03-61	DC-04-62	DC-05-63	DC-05-64 #	
14	- · ·	SAMPLE DEPTH	0-10	5'-15'		0-10-	2535.	107-25	1025.	151-251	5030.	1050.	0-10.	8.5'-20'	8.51-201	
2		DATE SAMPLED	17-15-96	12-15-86	12-16-86	2-11-97	2-11-87	2-12-87	2-12-87	2-16-87	2-17-87	2-17-87	2-17-87	2-17-87	2-17-67	2-18-97
		T Dioethyl Phthalate														
•		2 Acenaphtylene														
0		3 3-Mitroaniline														
1.5		4 Acenaphthene														
<b>D</b>		5 2,4-Dinitrophenol 6 4-Nitrophenol														
1.2		7 Dibenzofuran														
_["]		9 2,4-Dinitrotoluene														
		9 2,6-Binitrataluene														
113,		IO Diethylghthalate	-						· — · ·							
المال		1														
		12 Fluorene														
-		[3 4-Witroaniline							<del></del>							
- I i	-	14 4,6-Dinitro-Z-methylphenol														
20		15 M-Mitrosodiphenylamine											50000 J			
		16 4-Bromomhenyl-phenylether														
		17 Hexachiorobenzene														
		iB Pentachlorophenol										22619	474359 J			
		19 Phenanthrene	434.									11017	217949	9651		
		20 Anthracene		144 6								5357	******	103 0		
Di:e		21 Di-n-butyl phthalate				16250 J	155 3	63 1	325 J	5287		7477		3790 J		2785 J
27		72 Fluoranthene	·- ·- 684-	253 J									43390 J			
		23 Pyrene	553	215 J									202051			
10		24 Butyl Benzyl phthalate	•••										101471			
		75 - 3,3 - Dichtorobenzidine											· ·			
"		26 Benzo(a)Anthracene	263 J										121795			
		27 bis(2-ethylhexyl) phthalate	934	1266					225 J	1379	IJ	1905 BJ			2439 J	8
113		28 Chrysene	276 J								· <del>-</del>	2	282051		1991 J	
		29 Di-m-octyl phthalate														
•		30 Renzo(b)Fluoranthene	289 J	152 J									79487 J			
1,,1-		31 Benzolk)Fluoranthene	-37.						- *** *					-		
<b>)</b>		32 Benzo(a)Pyrene	211 J										46467 J			
(3.5)		33 Indeno(1,2,3-cd)Pyrene													•	
		34 Benzoig,h,i)Perylene					-						52564 J			
•		35 Bibenz(a,h)Anthracene														
	-															

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### Subsurface Soils Pest/PCRs

•	site	SITE J	SITE J	SITE K	SITE K	SITE K	BLANK	SITE L	SITE L	SITE L	SITE L	SIIE L	SITE N	SITE N	BLANK	SITE P
•	SAMPLE NUMBER	DC-J2-12 15'-25' 12-17-86	DC-J3-13 0-10' 12-17-86	DC-K1-08 0-10* 12-16-87	DC-1,2-25 0-10' 1-12-87	DC-K3-32 101-201 1-22-87	DC-LB-01 +	DC-L1-02 5'-10' 12-12-86	DC-L2-03 51-151 12-12-86	DC-L3-04 5'-15' 12-12-86	DC-L4-09 10'-20' 12-17-86	DC-L4-10 # 10'-20' 12-17-86	BC-N1-05 0-10 12-15-86	DC-M2-66 51-151 12-15-86	DC-WB-07 +	BC-P1-53 0-10 2-11-87
•	3 Delta-BHC 4 Gassa-BHC (Lindane) 5 Heptachlor 6 Aldrin 7 Heptachlor Epoxide 9 Edosulfan I 9 Bieldrin	<u>-</u>														
	12 Edosulfan II 13 4,4'-999		<u> </u>	•									•		·	
ļ	15 4,4'-98T 16 Methoxychlor 17 Endrin Ketone															
- 1						- · · · · · · · · · · · · · · · · · · ·	- A									
	25 AROCLOR-1248	<b></b>		117647 C	4880	<b>19000</b>										
•	26 AROCL OR-1260		179		6344											

•

**** * *** *** *

		SITE	SITE P	SITE P	SITE P	SITE O	S11E 0	SITE O	SITE O	SITE O	SITE O	BLANK	SITE 0	SITE O	SITE D	SITE O	SITE O
•		SAMPLE MUMBER SAMPLE DEPTH	BC-P2-54 251-351	BC-P5-55 101-25	DC-P5-56 1 101-251	0C-01-59 151-251	DC-D2-60	DC-03-61	DC-04-62 0-10'	DC-05-63 8.51-201	DC-05-64 # 8.51-201	DC-0B-65 +	DC-06-66 15'-25'	DC-09-72 0-10'	BC-09-73 151-20	DC-019-74 51-101	DC-016-75 101-151
		BATE SAMPLED	2-11-07	2-12-87	2-12-87	2-16-97	2-17-07	2-17-87	2-17-87	2-17-67	2-17-87	2-10-07	2-10-87	2-26-87	2-26-07	2-26-87	2-26-67
		i Alpha-BHC															
•		2 Beta-BHC 3 Delta-BHC															
• "		s vesta-em. 4 Gamma-BHC (Lindane)															
12		5 Heptachlor															
1.3		6 Aldrin															
	i I	7 Heptachlor Epoxide B Edosulfan I															
10		9 Dieldrin	*														
17		0 4,4'-DDE															
i a		1 Endrin															
	ŀ	2 Edosulfan II 3 4,4'-DDD															
20	1	4 Endosultan Sulfate															
2.0	1	5 4,4'-98T															
2 ,		6 Hethoxychlor 7 Endrin Ketone															
24		Chlordane					· ***										
		9 Toxaphene															
- 2/	4	O AROCLOR-1016															
2"	ì	I AROCLOR-1221 2 AROCLOR-1232								26829 C	30366						
1 20 X		3 AROCLOR-1242							1871795	20017 L	20,200			634146	24691	461579	11364
		4 AROCLOR-1248															
<b>3</b> 2	2	5 AROCLOR-1254															
_  ,,	! 2	6 AROCLOR-1260								5488 J	C 3902 J						

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Subsurface Soil Inorganics

_(	η-			211E	SILE 1	SITE J	SITE K	SITE K	SILE K	DL ANK	SITE L	SITE	SITE L	SITE L	SITEL	SITE N	SITE N	BLANK	SITEP
	,			SAMPLE MUMBER	DC-J2-12	DC-J3-13	DC-K1-08	DC-K2-25	DC-K3-32	DC-LB-01 +	DC-L1-02	DC-L2-03	DC-L3-04	DC-L4-09	DC-L4-10 1	DC-N1-05	DC-N2-06	DC-NB-67 +	DC-P1-53
- 1.	•			SAMPLE DEPTH	15'-25'	0-10.	0-16°	0-10,	19, 59,		5'-10'	51-151	51-151	101-201	101-201	0-10"	51-151		0-10"
•	١,			DATE SAMPLED	12-17-86	12-17-06	12-16-07	1-12-87	1-22-07	12-12-86	12-12-06	12-12-86	12-17-06	12-17-86	12-17-06	12-15-96	12-15-66	12-16-86	2-11-67
ľ	<u>,</u>	<del></del>	-7-	Aluainua	5026	7522	4788***	9073	10076	9397	10697	5205	7380	7120	1378	4763	1924	9395	2012
	e ]		2	Ant 100nv								32							
┗			3	Arsenic	2 1	6 6	9 \$	8 R	9 R	6.1	5 \$		172	55 t	68 1	3 t	2 1	6 1	
١,	.,		4	Bariua	106	1 44	112	202	192	410	197	192	192	114	142	130	46	358	126
	a)		5	Pervilium															
┛,			6	Foron															
١,			7	Cadeius		4	2	1	4			6						2	4
راه	4		8	Chromium, trivalent	7	55	351	22	15		16	15	10		3	8	5	13	16
	أجا		9	Cobalt	4	5	11				6	9	9			4	3	7	
- 1,			10	Copper	6	83	44	39	129	= :	12	105	141	92	101	10	5	33	50
	1			lron	7320	5489	17765	22439	20000	13846	16053	5564	11899	1500	1446	820	6253	16026	12750
			12	Lead	5.1	10 1	107 \$	132 R	238 R	43 #	9 1	106	41	5.1	5.1	24	34 1	78 \$	
- [,	``I .			Hansanese	113	827	499	388	404	345	253	44	149	10	10	164	82	429	201 \$
ام				Hercury			2.2	0.4	0.2				0.1				9		3.9
				Nicke)		72	20	20	21	14	21	406	2392	63	93	11	-	16	25 \$
ľ	]]			Selenium	•								•	•••		•••			
ا۔				Silver															
	3			Thallium															
ľ	<u>-</u>			Tin					17 -										
_	i			Vanadius			16	29	. 27	22	25	10	19					21	19
				linc	24	70	235	245	503	178	59	144	166	ii	10	42	65	182	463 #
ľ	<u>'</u>	<del></del> .		Cyanide		,,	255	273	303	1/0	31	177	100	11	10	42	9.3	102	103 +
		•	**	CABILINE			,												

	SITE	SITE	SITE	SITE	SITE 0	SITE 0	SITED	SITE	SITE O	SITE O	BLANK	O 3712	SITE 0	SITE O	SITE 0	SITE
••	SAMPLE MUMBER	DC-P2-54	BC-P5-55	DC-P5-56 #	DC-01-59	DC-02-60	DC-03-61	DC-04-62	DC-05-43	DC-05-64 #	DC-08-65 +	DC-06-66	DC-09-72	DC-09-73	DC-010-74	DC-010
	SAMPLE DEPTH	25'-35'	10*-25	10'-25'	15"-25"		1050	0-10.	0.5'-20'	8.5'-20'		15' -25'	0-10.	15' -70'	51-101	191-1
	DATE SAMPLED	2-11-07	2-12-07	2-12-07	2-16-87	2-17-87	2-17-07	2-17-97	2-17-97	2-17-87	2-10-07	2-10-07	2-26-07	2-26-07	2-26-87	7-76-8
		1274	<u>1136</u>	2538	2023	1352	3786	5882	3232	3061	6215	2148	4902	3346	2028	21
	7 Antimony 3 Arsenic		3 A	4.8			4 R		3 R	3 R	9 R	? R	6 A	3 N	<i>)</i> k	
	4 Deriva	14		117	57		12[	214	104	101	411		145	125	158	
	5 Recyllium													•		
	6 Boron 7 Cadmium						·				2				11	
	, causum 8 Chromium, trivalent	. 3	14	10	5	6	•	18	7	6.	10	5	13	6	22	
	9 Cobalt	_	-			-		- "								
	O Copper		16	24			~ 8	205	7		33		59		341	
	1 Iron	4131	15307	13000	5230	5705	7548	11059	8702	0232	12650	4815	11793	7580	11910	:
	2 Lead 3 Hanganese	4 1			1 401		7 I	329 1-	7 # 207 #	9 \$ 187 \$		4 1 79 1	19 1	5 J 152 F		
	d Hercury	0.6	***	714 4	100 1			4.3	,		33, 4	•••	1.7	0.3	1.9	
i	5 Mickel		15.1	23 #				45 1	11.1	10 1	15 1		38		136 1	
	6 Seleniua	-														
	7 Silver															
	9 Thallium 9 Tin												•		-	<u> </u>
	O Vanadium		22	16			13	10			15		19		15	
	l line	17 1		74 4	18 1	18 1	54 1	1398	37 1	35 1	181 1	17 1	277	30 \$	688 1	
7	2 Cvanide	13	15			* *	· · · · · · · · · · · · · · · · · · ·									
<del></del>											-	<b>.</b>		· · · · ·		
						=-										
•			1.0													
	,															
					* *-			***************************************	** * * *						•	
		•														
			***													
						· · · · · · · · · · · · · · · · · · ·			• • • •			•• •	** **		•	•
															·	
							,									

Reference Number 3

$\psi_{ij} = \psi_{ij} = \psi_{ij}$		.,
GOOM Softer LOG OF WATER WELL	)	
Property owner Midwest Lubber Co.	Well N	# of
Cart St. Jani		nay
Drilled by	Year	1951
Formations passed through	Thick-	Depth of Bottom
Clay.	7	7
Dry yellow sand	2/	28
Sulding sand	17	45
Fine gray sand	9	54
Jul Coans sand	6	60
Est. fin very disty sand silt	18	78
Coarse sand + Roulder	32	110
[Continue on back if necessary]		
Finished in COUNTY No 1040	o	ft.
Cased with inch from 0 t	0	ft.
and inch from t	0	ft.
Size hole below casinginch. Static level from sur	36	10" ft.
Tested capacitygal. per min. Temperature	ге	•F.
Water lawered toin. inh	rs	min.
Length of test hrs. min. Screen		<del> </del>
Slot Bottom se		ft.
Township name Elev. Show location in Section 2   Show location 3   Show	<del>_</del>	ec.26
Township hame	┼┤゜	ZN
Description of location	1 1 -	wp
	R	ge /0 'A]
Signed Signed NO ENVELOPE		
Signed County Co	26-2N	1-10W

		TI 000	INAL TO STA	115		J.
	. DO NOTE	TH PROTEC	TION, 535 W	EST	(35)	1
	PROPER W	L LOCATION	inidically wall	EK	7597	16 <b>4</b> 01616161 <b>7</b>
	GEOL	OGICAL AN	ND WATER	SURVEYS	WELL REC	ORD
		Cha	t. 01	. (^	Completed	4-12-76
		y owner Chair	Bring home	ter Co	Well No.	
٠.		al Clarks		Clay	se No. 103	
		No. 454	80 -	- Date	3-22-7	<u> </u>
	12. Water fr	om dand	4 Strang	13. Cou	nty #	ais
	at depth	40 to 7	£ft.	Sec	. 26 [	
		Diam.		Twp	AN -	
s	Length:	10 ft. Slo	ita V	-	. <u>10 w</u>	+++
	15. Casing	and Liner Pip	)e	Ele	·	
	Diam. (in.)	Kind and		From (Ft.)	To (FL)	SHOW
	698	PVC		0	78	CATION IN
						'SL, 587'W
					SW	(permit)
	6. Size Hol	e below casi	ng: <u>lo</u>	_in.		
	7. Static le	vel <u>/3</u> ft.	below casin	g top which	:h is	ft.
	above gr	ound level. hours.	Pumping leve	lft.	when pumpin	ig at 200+
: · · · ·						
	<b>8.  ₽</b> 0	KMATIONS PAS	SED THROUGH	ł	THICKNESS	DEPTH OF BOTTOM
						BOTTOM
	Clas				40	HO
	clas	مدلاه	vel		40	HO 79
	Clar	ar Ko L	ml		40 38	40 78
	Clay	مالاه	rel		38	40 78
	Clar	مدلاه	nel		38	40 78
が、	Clar	مالاه	rel		38	40 78
3. S.	Clar	مالاه	nel		38	40 78
10 (10 (10 (10 (10 (10 (10 (10 (10 (10 (	Clar	مه لا م د -	nel		38	40 78
が、	Clar	مالاه	nel		38	40 78
	Land	an Kar	nel		38	40 78
<ul><li>(2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4</li></ul>	Land	an Kar	wel		38	78
	Continue	ON SEPARATI		ECESSARY)	38	40 78
	Continue	an Kar		ECESSARY)	$\sim$	7-26

10000000

**S**ANTANIA

Andrew Street

partial place

ř	figure	21	Compens	way.
	100	OF	WATED	WELL

Property owner Richard Lufter Calaining	G.Well N	10. 2
Drilled by Harry (Margan)	Year	?
Formations passed through	Thick-	Depth of Bottom
Sandy soil	27	27
Liver silt	8	35
Coarse sand + pea gravel	9 8	43
Est dine and - silt	2/	64
Very arm sand	6	70
Coarse sand, wood, veg., de		8/
Very coages and		86
leny coars sand + gravel	28	114
[Continue on back if necessary]	<u> </u>	<u> </u>
Finished in	to	ft.
Cased with inch COUNTY NO. 1938 from	m 0 to	ft.
andinchfrom	to	ft.
Size hole below casinginch. Static level from	surf_25	<u> 6 " 1</u> t.
Tested capacitygal. per min. Tempe	rature	•F.
Water lowered toftin. in	hrs	min.
Length of test hrs min. Screen		<u>-</u>
Slot Diam Length Botton in		ft.
Township nameElev		Sec. 26
Description of location		LMb-SN
	++-,	Rge 10W
Location by Liver June To American County Claimed County County	مند	-
Copy for Illinois Stat Geological Survey FN V FINDER PE	26-2N	-10W

Secretary.	Seggist .		<b>*</b>	****	(c)
Carmer Lather	LOG OF	WATER WEL	L Recen	nung	
Property owner	Redive	et Cubb	lev, Co	Well No	<u>.3</u>
Drilled by Me	me C	norgan		Year	951
	ormations passed	11		Thick-	Depth of Bottom
Hard for	10			3	3
Finele		I+ silt	4	34	37
med fix		_	• •	14	
med lova			7	11	62
Buller		,	/ ·	4	71
Clean a		<b>a</b> //	0	23	94
Coare	_			8	102
mud a		<i>A</i>		10	112
77.41.40					
Title Lake to	T	on back to necessary	1		ft
Finished in	LOUIT	17 North Contract	أحر		
Cased withi	nch		from 0	to	
	nch		1		ft
Size hole below casi	ng	_inch. Static lev	el from sur	f. उँड ग्रीसन,	- /8 ft
Tested capacity	<u> </u>	_gal. per min.	Temperatu	ıre	•F
Water lowered to	ft	in. in_		rs	min
Length of test	hrs	min. Scre	en		
SlotDiag	nLe		_Bottom s		ft
Township name		Elev	_	S	ec.26
Description of locati	nm			山,	Law Z Ŋ
Secripation of locati	VII		- 	<del>                                     </del>	10 W.
Location by	El Moreco Ensur	idia long	11 l	ً ليسلس	Rge.
STCLAIR	Al)	County County	11 00	26-2N	<del>-</del> TOW
<b>CO</b> py for Illinois State	Geological Surve		•		(
	•				

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144	.0	

26-2N-10W

BBB Harry

(1) (a)

		M .C. 🗠
roperty owner Monsanto Chemical Co.	.Well N	20
East of Bldy. BI in plant 15'E. from ER. spar.	12.	U. # 3
Drilled by Franc-Westen (milliren)		2-13-49
Formations passed through	Thick-	Depth of Bottom
Cinder	/	/ ~
Clay	2	_حی
Sandy clay	26	31
Hede fine sand	30	61
med band gray	13	74
must to coarse wand		79
look + coarse sand	z	51
Coare sand	3	84
Gares sand + 21 most & small rocks	19	103
[Continue on back if necessary]		
Finished in	to	ft,
[COUNTY No. 1949]		
Cased with inch inch inch inch	to	ft.
	to	ft.
Size hole below casinginch. Static level from sur	·1	ft.
Tested capacity gal. per min. Temperatu	ıre	•F.
Wafer lowered toin. in. in.	ırs	min.
Length of test hrs min. Screen Sau	16-	
Slot Diam Length 25 Bottom s	et at	ft.
[Show location in Sec		
Township nameElev	] 5	Sec
Description of location NE Second	4-4 7	CWP 2 /V
TON NOW	┼┤,	Rge. / 6 (1)
<del></del>		

LOG OF WATER WELL

1000

roperty owner Milwest Rubberte	Claiming.	eWell N		
rilled by Maryle (Maryless)		_Year	>	
Formations passed through		Thick-	Depth of Bottom	
Sandy loan		10	10	
Dry sand		14	24	
Caprol Sand		14	38	
Coare sand some good	ref	4	42	
Fin sand		24	66	
Est fine sand		8	74	
Crarl sand foulder	~	8	82	•
Very Course sand + gran	rl	24	106	
[Continue on back if necess	ary]			
sed with inch COUNTY No. / 23/	from 0	_to	ft. ft.	
andinchfro	m	_to	ft.	
ze hole below casinginch. Static le	vel from su	rf	3' <u>Z</u> #ft.	
sted capacitygal. per min.	Temperat	ure	•F.	
ater lowered toin. in.		hrs	min.	4. Au
ength of testhrsmin. Scr	een			
otDiamLength[Show	Bottom		ft.	1
ownship nameElev	_[]		Sec. 26	
escription of location	-	7	Rge (1) (1)	
water of Strougherester Bir	7 1 18 00	' لــــــــــــــــــــــــــــــــــــ	Rge	ing gir

26-2N-10W

Sec. 2

Self-service

1.44.15

LOG	OF	WATER	WFII

Property owner Knownto Ching Co.	Well N	. 19
(80'5+E of main entrape gat)	Z.W.	# 2
Drilled by Lyne Westen (2. Sallee)	Year A	eg. 1948
Formations passed through	Thick-	Depth of Bottom
Cinder + clay fill	Z	2_
Brown sand	14	
Sound the rlay	2 27	18
Med arm sand	5	50 5-5-
med chara cand - graped, much rotten word	6	67
Charle dand y to avel	سق ا	66
Corre sand + save	ファ	73
Coarse from sand	5	
med. bornich som sand + bolle s	4	
Correccion sand		90
" + sravel		108
[Continue on back if necessary]	1 / 0	700
Windshad in	•	ft
Cased with inch COUNTY No. 1948	·	1 %
Cased with inch from 0 t	o	ft.
and inch from t	o	ft.
Size hole below casinginch. Static level from sur	f	ft.
Tested capacitygal. per min. Temperatu	ге	•F.
Water lowered to ft in, in h	rs	min.
Length of test hrs min. Screen Skee	Cle	
Slot Diam Length 25 Bottom se	t at	ft.
[Show location in Sec	tion Plat	3
Township name Elev.	z 🖈	ec. <u> </u>
Description of location JE NE Sec. 26	Н т	wp. 21
T 2N, R10W	H R	ge /c · )

::::

*****

1988

Brown Sta

ক্তব্যক্ষিট্রি)

# LOG OF WATER WELL

(4)

Property owner Monegato Chem. Co.	Well N	0.15
10 10 10 10 10 10 10 10 10 10 10 10 10 1		B. 1941
Formations passed through	Thick- ness	Depth of Bottom
Lolog	70	
Fine sand	5	75
Fine sand + gravel	_5	80
Coare sand + gravel	5	85
	5	90
Course sand	5	95
Come sand + soul	سى	100
n - n - n	سى	105
Sand + gravel	ノニ	106 =
Finished in COUNTY No. at t	o	ープル ft.
Cased with inch from 0 t	o	ft.
and inch from t	0	ft.
Size hole below casinginch. Static level from sur	<u>, 3</u>	<u>Y'ft.</u>
Tsted capacitygal. per min. Temperatu	re	°F.
Water lowered toftin, inh		
Length of test hrs min. Screen falce	KAL	
11 11	t at	ft.
Township name Elev Elev		Sec 3 6
Description of location W. NF Sc. 26	1	(wp. ) //
TON Plow	<u> </u>	Rge <u>(~ ()</u>
Signed County Strawn water Live St.	Cari	
Copy for Illinois State Geological Survey Index:	26-2N	<b>-1</b> 0W

LOG OF WATER WELL		
and the second s		#16
Property owner Monsanto Chem. Co.	.Well N	· Z
Drilled by Watson (Walg)		in 1941
Formations passed through	THICK-	Depth of Bottom
Fill	10	10
mud	8	18
Fin gellow sand ->?		
Sand	20	38
gravel	38	76
Fin gravel	سی	81
gran gravel	10	91
gravel	10	101
gravel	5-	106
[Continue on back if necessary] 70 =	106	,
t misted in	)	ft.
Cased with inch COUNTY No. 1946 from 0 to	)	ft.
and inch to		ft.
Size hole below casinginch. Static level from surf	_3	<u>ft</u>
Tested capacitygal. per min. Temperatur	e	•F.
Water lowered toftin. inhr		
Length of test hrs. min. Screen felix		
Slot Diam 16 Length 30' Bottom set	at	ft.
[Snow location in Section in Sect	on Plat]	
Township nameElev	Se	c. 2 6
Description of location SW, NE Scc. 26	Tw	m = V
Tan, RIOW	Rø	e/0 []
Francis Lucater Day 24. 00		
Bigned County 24. Of Copy To Atlimois State Geological Survey NVE Lindex.	26-21	N-10W

Alterial Control

: 14.4.3

# ILLINOIS GEOLOGICAL SURVEY, URBANA

Strain	Thickness	Тор	Bottom
Redish sandy and blue silt		0	15
Grey sand little silt		15	20
Grey sand		20	25
Blue and grey sand		25	30
Fine grey sand		30	35
Fine grey sand and blue silt		35	40
Fine blue and grey sand		40	45
No recovery wash samole. Fine blue			
and grey sand		40	50
No recovery wash sample. fine blue			
and grey sand.		50	55
Fine blue sand, No recovery		55	60
Blue sand and wood no recovery		60	65
Grey and blue sand. No recovery		65	70
Fine blue sand. No recovery		70	75
Fine blue sand. No recovery		75	80
Medium blue sand. No recovery		80	85
Mixed grey and blue sand no recovery		85	90
Mixed grey and blue sand. No recover	y	90	95
Mixed blue and grey sand. Could not	•		
drive sample Barrell. Felt like			
gravel		95	100
Blue and grey sand. No spoon sample	i		
taken.		100	105
Blue and redish sand. no spoon sampl taken. Drove casing to 110°4°.	Ço,	:	
taken. Drove casing to 110°4". A Se	ŧ		
well screen at 108*11". Could not	get		
any deeper as sand was running unde	r		
casing.		105	110
Total Depth			110°4"
			TD
Location plat filed.			
s.s.# 29900			
		I	

	1	
Wabash Drilling Co.		
Monsanto Chemical Co. No. SR.2		***
November 1956 COUNTY NO. 1987	<del>}-</del> ∳-∔-∔-	<del>┝</del> ╺╪╍╁╍
Wabash Drilling Co.		
412/5° refusal (MSL)	<del>ĬĬĬĬ</del>	┝╅╂╸
6801W € 90° 10°W. longitude. 4310°B		
ST. CLair Projected 26-	2N-1	.OW
	Monsanto Chemical Co. No. SR-2 November 1956 COUNTY NO. 1987 Wabash Drilling Co. 412/5° refusal (MSL) 6801W f 90° 10°W, longitude, 4310°B	Monsanto Chemical Co.  No. SR. 2  November 1956  COUNTY NO. 1987  Wabash Drilling Co. 412,5° refusal (MSL)  680°W f 90° 10°W longitude, 4310°B  0680°W f 35° north latitude:

Property owner Konsento Chim. Co. (Plent'8"	Well N	612
Drilled by H.C. Water	Year_	IV
Formations passed through	Thick-	Depth of Bottom
nolo	70	
Fin spind	5	25
Coard sand ramvel	سی	85
u	حی ا	90
<i>M</i> 44	5	95
P4 54 500	5	100
Sand + gravel	سى ا	105
7 -, 0	-5	110
7 est- bould	2	112
[Continue on back if necessary]	to	ft
Cased with inch inch 1944	to	ft
and inch from	to	ft
Size hole below casinginch. Static level from sur	1.39	<u>'6" f</u> t
Tested capacity 250 gal. per min. Temperatu	ıre	°F
Water lowered toftin. inh		
Length of test hrs. min. Screen filese	***	
	et at	ft
Township name Elev.		Sec
Description of location SE, NE Sic. 26.	X	Twp
TON BIOW		Rge / W
Signed County	min	<del></del>

LOG OF WATER WELL

464 (S)

14. 1 . 0	,	Zet well
Property owner Moneauto Chess. Co.	-	0
Drilled by Layre - Westers (F. Salles)	_YearZe	B.1948
Formations passed through	Thick-	Depth of Bottom
Land even a Can	8	12
Clas Blesta sant turning from	3	15
Brown sand w/ clay	10	30
Brown sand throning group		35
Finato med, gray sand! med gray sand!	5	40
med gray sand	10	55
med to codore gray sand	15	70
sand of Boulders, Blue clay showing	5	75
Timeto rough sand selt ten boulding		80
med. to con se gand + gravel	5	85
	15	100
Crare sand gravel - loulders	8	108
021 rock + 10%		
[Continue on back if necessary]		
Finished inat	_to	ft.
Cased with inch COUNTY No. 19.42 from 0	to	ft.
and inch from	_to	ft.
Size hole below casinginch. Static level from su	rf	ft.
Tested capacitygal. per min. Temperat	ure	°F.
Water lowered toftin. in	hrs	min.
Length of test hrs. min. Screen		
Slot Diam Length Bottom	set at	ft.
[Show location in Se		
Township name Elev. 4/0	X s	sec_ > 6
Description of location AF ME Sec. 26		'wp2 //
-3N. R1010		Rge <u>/ (* ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' </u>
Signed County 14.	( 10. 1) L	
t.CLATR NO MAILIFIORE	26	-2N-10W
Copy for Minois State Geological Survey		**

LOG OF WATER WELL	L	WEL	TER	A	W	F	0	G	LO	1
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LOG OF WATER WELL	( ~~	ince
roperty owner Monsanto Chien. Co.	Well N	o wy
willed by Layne-Western (F. Sallee)		,
I		6.1948 Depth of
Formations passed through	ness	Bottom
Brown to cultur class	Ŷ	10
idour Salache alon	20	30_
Brown Saul Clay showing	70	40
THE GARD STENE STENES, CLASSINGE		50
Time sealed and + grand - wordat 68-70	10	70
Fine to Convelend+ grant, soulders	س	7:
Fine to Convel cand + grant, South	10	85
Medium fine sand sour gravel	5	20
medium to con se sa not grand bul	19.87	109'8"
<i>'</i>		
an rich at 109'3"		
Parating of National Comments	<u> </u>	
[Continue on back if necessary]	0	ft.
Cased with inch COUNTY NO. 1943 from 0 t	0	ft.
and inch	0	ft.
Size hole below casinginch. Static level from sur	ſ	ft.
Tested capacitygal. per min. Temperatu	re	•F.
Water lowered toftin, inh		min.
ength of test hrs. min. Screen	6 6	
Slot Diam Length Bottom se	t at	ft.
SlotBottom se	t at tion Plat	ft.
Slot Diam Length Bottom se	t attion Plat	ft.

Section .

in the second

\$ 3 . > . . .

-500 A

12:11:1

63 6 335

in the second

ILLINOIS GEOLOGICAL SURVEY, URBANA

.....

11:30

101 ILLINOIS GEOLOGICAE SORVEI;			
	Thickness	Тер	Bottom
	1'6"		1'6"
Soil .	34		35'6"
Sand	6		41'6"
ine gravel	1 - 1		65'6"
Gravel & sand	24	!	84'6"
Gravel & boulders	13		90
Gravel	5'6"		
Coarse gravel & boulders	18		108
Tested 1400 gallons per minute.			
Water stands 12'6" from surface of gro	und.		
Water stands 26'6" when pumping 1400 gallons per minute.			
Size of well 24".			
20 cubic yards of gravel.			
Material used in well:			
50' of 38" Pit,	1	1	1
106'8" of 24" which includes 58' of Shutter Screen & 48'4" of 24" Pit.	24"		
Kind of seal used Steel Plug.			
:			
*50'N and 50'E of crossing of Alton &			

Southern R.R. & Falling Springs Rd. BOMPANY

Layne & Bowler Company Monsanto Chemical Works

NO. 1 DATE DRILLED May 8, 1920 **COUNTY NO. 1741** 

Layne & Bowler Co.

AUTHORITY

410' ± ELEVATION

LOCATION COUNTY

FARM

ST. CLAIR



Projected 26-2N-10W

	LOG OF WATER WELL		est well
	Property owner Monsanto Chem. Co.	.Well N	o_ <del>*</del> /_
	Drilled by Lagry - Westin (F. Sally)	Year Z	6.1948
	Formations passed through	Thick-	Depth of Bottom
•	Soil Fill Cinder Will	11/1	5
المام المعاد	Cindro, Plus, grun day Cindro + fine black soul	5-	10
	Fine black sand + clay med gree sen	D 5-	20
	Fin Plack muchy sand want get Edward	20	45
	coone gray sand	10	55
	Fine, pable Agran bount and bulling with Jand + gravel, pasked up much fine sand	14 3	74
	Parket soud, graves - bollens	3	80
	Fichel sand, gravel + Goulders	13	9.3
	Sand + Boulders	9	102
	(Formation in preval is restrict)	1	TD
	Finished in [Continue on back/if nocessary]	io:	ft.
	Cased with inch		ft.
		:o	
	Size hole below casing inch. Static level from sur		
	Tested capacitygal. per min. Temperatu	re	•F.
eszárlalljá.	Water lowered toftin, inh	rs	min.
	Length of test hrs. min. Screen		
	Slot Diam Length Bottom se		
	Township name Elev. 4/12		ec 26
	1000	┤┤ "	- 1/
	Description of location Shi NF	T T	'wp'
Maring to	Together de Lineway water Direct	F	lge /old
	Signed County St. (	City	

Simple.

Banks:

# LOG OF WATER WELL

ARRIVA

Property owner Lewin - Mathe	Well N	0
Drilled by H.L. Water (MAL)	Year	ory 1948
Formations passed through	Thick-	Depth of Bottom
Territal	3	-3
Fine sand	12	سى
n n	20	35-
n n + gravel	10	45
med sand + girel	2	47
777	1	48
mell. Sandy gravel	4	ح_
n n n n trock	10	62-
4 4 4	8	20
n n n n toral	1 3	80
	ے ا	85
Corn sand - red	5	90
Cransand	~	25
Bruller	1	96
Crary sput - rock		1
	ŀ	l i
	<u>!</u>	<u> </u>
[Continue on back if necessary]		
Finished in COUNTY No. 1933	:o	ft.
Cased with inch from 0 t		ft.
and inch from		e.
and inch irom	.0	b.
Size hole below casinginch. Static level from sur	f	ft.
Tested capacitygal. per min. Temperatu	re	°F.
Water lowered toftin, inh	rs	min.
Length of test hrs. min. Screen	<del>-</del>	
Slot Diam Length Bottom se	et at	ft.
(Show location in Sec	tion Plat	1
Township name Elev.	$\square$ s	ec.
	<del>-  </del>	
Description of location 1/F W Second	<del>                                     </del>	wp
TIN RIOW	+- ,	Rge /
Recotion Ly Dinner Lwater Hay	- <b></b>	
Signed County 1		
St. CLAIR Copy for Illinois State Geological Survey Index!	40-	2N-10W

### LOG OF WATER WELL

Property owner Leven - Wather	- Hones	to M.	.Well N	0
Drilled by H. C. Waten (gr				
Formations passed th			Thick-	Depth of Bottom
Fin Sand			20	70
Fine soul + grav	el		8	78
Good formate	r.		26	
<u> </u>				
	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·
COUNTY NO	1936	-		
	Micheller.			
[Continue on 1	back if necessar,	y]	<u> </u>	
Finished in	at	t	0	ft.
Cased with inch		from 0 to		ft.
andinch	from_	t	D	ft.
Size hole below casinginc	h. Static level	from surf		ft.
Tested capacityg	al. per min. I	l'emperatur	·e	•F.
Water lowered toft	in. in	hr	s	min.
Length of testhrs	_min. Screer	·		
Slot 30 Diam / Lengel	26'5"	Bottom set	at	ft.
Maramakia aasaa		tion in Sect		
Township name		┝┼┼	Se	<u> </u>
Description of location NF, SW				wp/
Jacobin Ly Dranger	Tiz Dirk-		R	ge_ / - W
Signed	_County	54. C	<u>(,,,',,</u>	
Cop Cit Alliabis State Goological Survey	Index:			N-10W

::d

ILLINOIS GEOLOGICAL SURVEY, URBANA

PERMIT # NF 08825	Thickness	Top	Bottem
A 4" test hole was first drilled to a depth of 111', then filled in with sand and later re-drilled with a bigger bit. Both records follow.			
TEST HOLE			
Clay Silty sand brown Fine sand brown Fine sand gray Medium sand gray Medium sand gray Coarse sand gray with pea gravel Coarse sand gray with pea gravel Coarse sand gray with pea gravel Very coarse sand gray with 3/8" gravel Very coarse sand gray with 2" gravel WELL RECORD		0 12 22 31 42 52 57 62 87 92 97 102 105	11 21 30 41 51 56 61 86 91 96 101 104
Clay		0	18
Sand coarse gray with gravel Sand fine			20 25 30
Sand coarse gray with gravel Sand coarse gray with gravel Sand coarse gray with 1" gravel Sand coarse gray with 1" gravel Sand coarse gray with 3/4" gravel		55 65	35 40 45 60 70

Luhr Brothers, Inc. OMPANY

Cerro Copper & Brass Co.

July 10, 1970 COUNTY NO. 3208

ATE DRILLED Company UTHORITY

LEVATION

OCATION

OUNTY

ARM

1000' W line, 400' W line of NW

ST. C .IR

26-2N-10W

September 16.

ILLINOIS GEOLOGICAL SURVEY, URBANA

1.4

TILINOIS GEOLOGICAL SURVEY, URBAN	7			
	Thickness	Tep	Dettem	
Sand very coarse gray			75	
Sand very coarse gray with cobbles to		80	110 <del>}</del>	
•		00	TD	
Well Casing: Material - Steel coated with bituming			,	
Diameter: 20" outside diameter	ous		plosities.	digitar.
Length - 78.731				
Wall Thickness075				
Final Casing Elevation Above Grade: 1'				
Size of Drilled Hole:	1 1			
40" to 201				
38" to bottom			-	
Well Screen:				:.
Material - Stainless steel #304	{			
Diameter - 20" nominal Length - 31.82				
Slot Size100				
Type Make - UOP Johnson	j [			.•
Depth of Screen set at 110.55'			:	
Gravel Filter:				
Used 23 tons Muscatine, 1/16" - 3/16				
No. 3			: [4.868].	i.
Wall Thickness - 82" Feet Above Screen - 26'				
Static Level: 23.86				
S.S. # 57106.			ſ	
			1	
•	i	i		

Luhr Bros., Inc. ST. CLAIR

Cerro Copper & Brass C( 26-2N-1UW



OWNE. St. Louis-Toloresento P. O. Map No. 4W R. 10W

COMPANY F. Thorpe- Engineer

CARM Evang-Wallower Zinc Cso. 2 Tolore.

AUTHORITY F. Thorpe.

COLLECTOR

DATE DRILLED March 1929

		Thickness		Dep	th
COUNTY	STRATA NO. /740	Feet	In.	Feet	In.
		16	İ	16	
Subsol	ll & clay	ii	}	27	ļ
Sand,	extremely fine	8	\	35	
Sand,	very fine, loamy	11		46	Į
Sand,	very fine	6	ĺ	52	1
Sand,	Tine	6 3	1	55	1
Sana,	very fine	7	1	62	
Sand,	fine, gritty	•	1		1
Boulde	ers up to 4" with	5		67	i
some	sand	14	1	81	
Regul	ar building sand	2	1	83	
	medium coarse	19	1	102	
Sand,	very coarse		l l		1
insta I.D. Evans P.O., above we we	ng the month of March, it alled a porous concrete and 40" O.D. at the plant of the	well 30 ant of 4 Monsanto and the strata aries w	ith		
NO I	ENVELÓPE				

TOWN **East St. Louis** WNSHIP

COMPANYThorpe Concrete WellnCo.

FARM Certain-teed Products No. 3

AUTHORITY Written log

ELEVATION 416 topo.

COLLECTOR Ireland DATE DRILLED 4-34

R. 10W

13 1 P

Map No. 4W

confidentiath and Broadway

		Thick	Thickness		Depth		
No.	COUNTY NO. / 7.3 9	Feet	In.	Feet	In.		
	Ginder fill Gumbo Soil, sandy Sand, fine Sand, extremely fine	6 4 7 10 13		6 10 17 27 40	:		
	Sand, fine, camy Sand, fine, gritty Clay, blue Sand, quick Band, fine Sand, gritty Gravel, fine Sand, coarse Boulders 2" to 10"	13 7 4 26 2 9 6 2		53 60 64 90 92 101 107 109 116			
	Baits drilled 3 wells	1-21 7-17 11-17		120 120 119			
	NO ENVELOPE						

County ST. CLAIR

Index No.

04W 24

T.-DRILL RECORD

24-2N-10W

24-2N-10W

04W24

Index No.

T.-DRILL RECORD

St. Clair

CONFIDENTIAL

, ;

REPORT OF

47327-10M-4-35

4 Illinois Geological Survey, Urbana.

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1908. 302136

(575-5M-7-23)

TOWN Cahokia TOWNSHIP MAP No. 4W
COMPANY Union Electric Light & Power 10W
FARM 100 ft. S. of N. property Line of 10W
AUTHORITY Eastern Inner Harbor Line. 2 Proj.
ELEVATION HOLE No. 7 N 23
COLLECTOR DATE DRILLED

	CTP ATA	TRICKNE	5 <b>5</b>	DEPTE	====
	COUNTY NO. / Z STRATA	Faret	IN.	FEST	in.
	Water	16		16	•
	Sand, fine	12		28	
	Sand, coarse	10		<b>3</b> 8	
	Sand, very coarse	10		48	
	1/2 in. gravel				
	Sand coorse	27		75	
	Sand, coarse 5% 1/2 in. gravel	4	, i	79	
	5% 1/2 in gravel	_			
	Sand, coarse	4		89	,
	25% 1/2 in. gravel	3	·	Q.S	
		3		92	
	Sand, coarse	3		74	}
	40% 3 in. gravel	3.0		704	
	Sand with gravel	12	8	104	8
	Minus 76.06 rock				
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No.	Ones ATTA	THICKNESS	DEPTH
.10.	COUNTY NO. STRATA	FRET IM.	FRET 10.
	Water	35	35
	Sand, fine	5	40
	Sand, coarse	10	50
	Sand, coarse 5% 2 in. gravel		
	Sand, coarse 15% 1/8 in. gravel Sand, coarse 20% 1 1/2 and 10%	15	65
	15% 1/8 in. gravel		
į	Sand coarse	12	77
	20% 1 1 /2 and 10%		''
i	1/8 in. gravel		
1	1/0 Int graver		
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County Index No.

DRILL RECORD Projected 23-2N-10W

HOUSE? HERMAN

(575-5M-7-23)

WN Cahokia Township MAP No. 4W
MPANY Union Electric Light & Power 10W
RM 100 ft. S. of N. property line THORITY 258 ft. E. of Eastern Inner 2
EVATION Harbor line. HOLENO. 1

LLECTOR DATE DRILLED

rown Cahokia Township
company Union Electric Light and Power Farm 300 ft. S. of N. Property Line
authority 250 ft. E. of Eastern Inner
elevation Harbor line Holene. 2
collector Date Drilled

er	M/	Nо. 10.	4	₩ '
* (2)				en Proj
Ñ				Proj.

_	STRATA	TRICENE		DRPTH		
_	COUNTY NO. / Z3O	Fant	Ix.	Fx87 30	1=.	
_	Mud, black and fine sand	30				
• •	Sand, fine	4	ŀ	34	]	
•	Sand coarse	2	1	36		
	5% 1/8 in. gravel		1			
	25% 1/4 in. gravel	2	ļ	38	Ì	
	told of the manage	2	- 1	40	ļ	
-	30% 2 in. gravel	2	Į			
!	Sand, coarse	8	. ]	48		
	30% 1/8 to 1 in. gravel					
	Sand, coarse	4		52		
•	10% 1/4 in. gravel		-	•		
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No.	STEATA	TRICKNESS		DEPTH		
	COUNTY NO. 7/3/	Fast	IN.	FERT	Is.	
	Sand, fine	10		10		
	Sand, very fine	8		18		
	Mud, black	6		24		
٠	Mud, black and fine sand	11		33		
	mixed					
	Sand, fine. 10% 1/4 in.	5		38		
	gravel	•		00		
į.	Sand, coarse. 15% 1/2 in.			• .		
1	gravel			4.5		
		5		43	İ	
1	Sand, coarse	5		48	Ì	
	20% 1/2 in. gravel	,				
	Sand, fine	5		53		
1 1	Sand, coarse. Pieces of					
	soapstone .	5		58		
	Sand, coarse	8		66		
1	5% 1/4 in. gravel					
	Band, coarse	6		72		
	10% 1/2 in. gravel			.~	!	
	Sand, coarse	4	İ	76	l	
	20% 4 in. gravel	**		10	1	
	gond access	7.5	ĺ	Í	Ì	
	Sand, coarse,	15		91	1	
	20% 3/4 in. gravel		ļ	<u> </u>	]	
	Sand, coarse	10		101	ļ	
	351 MG 4.5 m 4		1		j	
	Minus 73.66 Rock	[	1	1	ł	
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St. Clair

County

MINOS STATIProjected 23-2N-10N

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LOG OF WATER WELL	
me american June co.	€′
over owner monesonto, sell. Well No.	
led by	
Thick-   De	pth of ottom
Tumbo 20 3	20'
Quick sand 30	50
	'
Sand 16 6	66
med. Sand 10 7	76_
red. send	
no log 26/	102
ros avg	
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[Continue on back if necessary]	
nished instto	ft.
ICOUNTY No. 1927	
sed withinclfrom 0 to	ft.
and inch from to	<b>f</b> +.
andinchtoto	
te hole below casinginch. Static level from surf	ft.
sted capacitygal. per min. Temperature	•F.
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in amon Carlo	
ength of test hrs. min. Screen College	
ot Diam / Length 30' Bottom set at	ft.
[Show location in Section Plat]	
J	23
vnship nameElevSec.	
	-2N
escription of location F. Two	ħ. <del>=</del> -
ocation: bus described from the Registration of the County St. County 23-2N- opy for Illinois St. Geological Survey ENULY REPORT TO THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPER	1010
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scales, by structure of the China	
gned County 23-2N-	IOW
py for Illinois S' Geological Survey Index:	

LOG OF WATER WELL		
Property owner monerate Ill.	Well M	09
_		
Drilled by H. C. Water (q. W. Finler)		
Formations passed through	Thick- ness	Depth of Bettom
mus	35	35
Sand	4/5	80
nelium sand	20	100
Sand + coare gravel	4	104
	<del>-   7</del> -	207
		<u> </u>
[Continue on back if necessary]		
	to	ft.
Cased with inch ADIELLY No. /2 28 from	0 to	ft.
and inch COUNTY No. /9.28	to	ft.
Size hole below casinginch. Static level from s	urf	ft.
Tested capacitygal. per min. Tempers		
Water lowered toin. inin.		
Length of test hrs. min. Screen		
Slot Diam 40" Length 60' Bottom		
Township nameElev		Sec. 23
Description of location Shi, TF Louis 23	<del>     </del>	rwp_=V
	1   1	
Least the by Brown Kington bur	<u> </u>	Rge /oW
Signed County St.	Com	
+ OT ATD NO IT NUCLEUME	22/	1-1 OW

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#### ILLINOIS GEOLOGICAL SURVEY, URBANA

INDUSTRIAL Permit #NFL8L9	Thickness	Top	Bottom
Yellow brown clay Fine sand brown Medium coarse sand brown Coarse sand brown with pea gravel Coarse sand brown Medium coarse sand brown Medium fine sand brown Fine sand brown Very coarse sand gray with 12" gravel Very coarse sand gray with 3/4" gravel Very coarse sand gray with 3/4" gravel Very coarse sand gray with 3/8" gravel Very coarse sand gray with 3/8" gravel Very coarse sand gray with 3/4" gravel Very coarse sand gray with 3/4" gravel Very coarse sand gray with 3/4" gravel Very coarse sand gray with 3/4" gravel Very coarse sand gray with 3/4" gravel		0 10 25 30 35 40 55 60 70 85 90 95 100 105 113	10 25 30 35 40 55 60 70 85 90 105 107 113 116
Size of hole 38"  Casing: 88" - 18" outside diameter steel  Casing elevation 2' above grastatic water level 36.9' top of casing 24 tons gravel pack 11" wall 45' aboscreen: Johnson Stainless Steel 18" n diameter. Length 30' set at 116'  Slot size: .060' Two well 300' apart were drilled under #NF4849  S.S. # 55984  NO ENVELOPE  * North Reservoir	ve sci omina]		

Luhr Brothers, Inc. COMPANY Midwest Rubber Reclaiming Go. 10 2856 September 3, 1968 DATE DRILLED COUNTY NO. Luhr Bros. Inc. AUTHORITY

ELEVATION LOCATION

COUNTY

Lot 209 Third Subdivision of Cahokia* Commonfields ST. CLAIR

23?-2N-10 W

'ILLINOIS GEOLOGICAL SURVEY, URBANA

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Page 1

13

INDUSTIRAL Permit #NF4849	Thickness	Тор	Bottom	_
Brown Clay Brown silty sand Fine sand brown Fine sand gray Coarse sand gray with pea gravel Medium coarse sand gray Coarse sand gray Medium fine sand gray Very coarse sand gray with pea gravel Medium coarse sand gray with 3/4" gravel Medium coarse sand gray with pea gravel Medium coarse sand gray with pea gravel Very coarse sand gray with 3/4" gravel Very coarse sand gray with 3/4" gravel		0 5 20 25 30 35 40 45 55 60 65 70 75	5 20 25 30 35 40 45 55 60 65 70 115	
Size of hole 38" Casing: 88.70' - 18" outside diamete steel	}			
Two wells 300' apart were drilled unde NO ENVELOPE	r Perr	it #NF	849	
Southwest Reservoir S.S.#55983				

Luhr Brothers, Incorparted. Midwest Rubber Reclaiming Con. COMPANY 11 FARM September 6, 1968 2857 COUNTY NO. DATE DRILLED Luhr Bros. Inc. **YTHORITY** 

ELEVATION

Lot 209 Third Subdivision of Cahokia Commonfields

23?-2N-10W

S 4: 2

DOATION

ST. CLAIR

COUNTY

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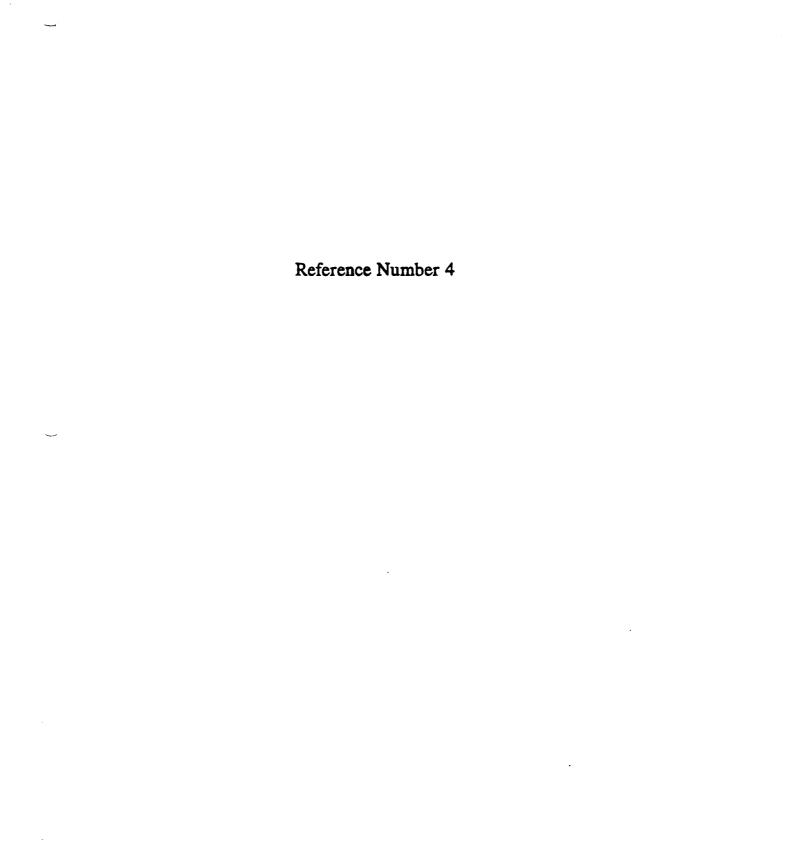
LOG OF WATER WELL American Zine & - Momento

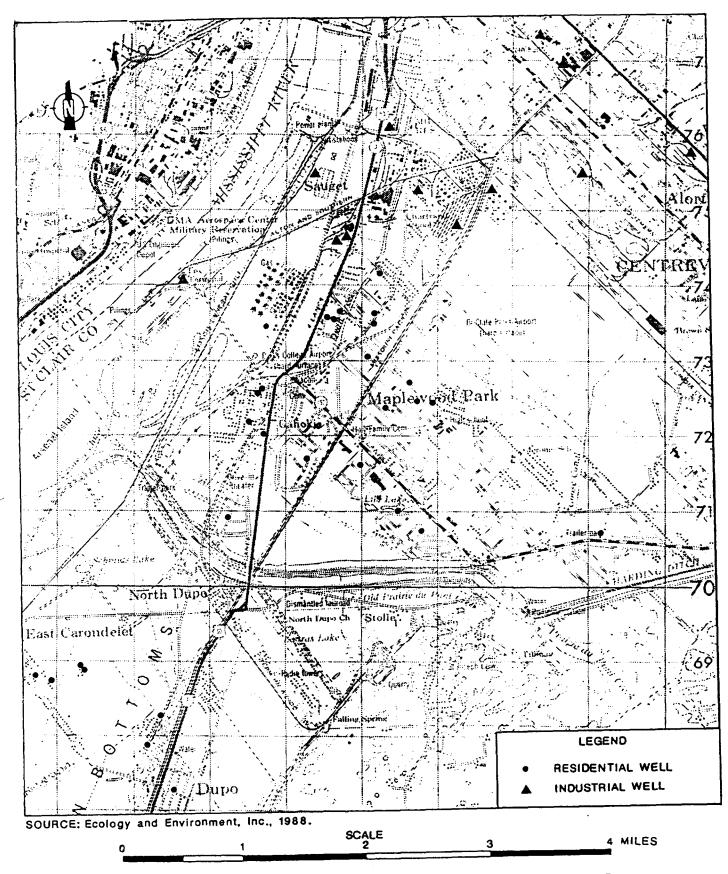
10.00

Property owner Writed Conginus + Court. Lue, C.St. Komin	.Well N	o <u> </u>
Drilled by H. L. Watson (Landomille)		rv. 1940
Formations passed through	Thick-	Depth of Bottom
Cinder+ Mend	15	15
Fine Sand	60	75
good water bearing formation	30	105
Quichant to sospeton	2	107
A coulous		
[Continue on back if necessary] Finished in at	to	ft.
Cased with inch from 0	to	
COUNTI NO. (9.24)	to	ft.
		,
Size hole below casinginch. Static level from sur		
Tested capacity gal. per min. Temperate		
Weter lowered toftin. inl		min
Length of testhrsmin. Screen Gole	<u> </u>	
Slot /20 Diam. /6 Length 30' Bottom s [Show location in Se	et at	
Township nameElev		3ec. 23
Description of location - E Sec 2 3	7	rwp_ <i>_2 //</i>
T211, P1.W 6	, x	Rge <u> /                                   </u>
Signed County St. C	Lain	,
CLAIR COLONIA COLONIA CON VIETANE		2N-10W

## LOG OF WATER WELL

Property owner United Escariose	.Well N	2
Property owner Muted Escapeller american Jina Co. namanto, Ele Drilled by Watson (Morette' & Carila)	· .	1942
Formations passed through	Thick-	Depth of Bottom
Dirt	5	
Zine sand	45	50
coare sand	25	75
gravel	30	105
<i>O</i>	ļ	
	1	
COUNTY No. 19.29		-
1	Ţ	
[Continue on back if necessary]	<u> </u>	<u> </u>
Finished inat	to	ft.
Cased withfrom 0	to	ft.
and inch from	to	ft.
Size hole below casinginch. Static level from sur	1_33	6 ft.
Tested capacitygal, per min. Temperate	ıre	•F.
Water lowered toftin. in	rs	min.
Length of test hrs. min. Screen	<del></del>	
Slot 40+50 Diam. 16" Length 30' Bottom s. [Show location in Se	et at tion Plat	ft.
Township name Elev. 40 V	s	ec. 23
Description of location $SE, SES, SES, TAN, POLITION$	1 1	wp. 211
Foo' N90°10'7000'N 3x°35'	X B	lge <u>/200</u>
Signed County Fr. C.C.  Copy for Illinois State Geological Survey Index:	21-	ZN-IOW
Copy for Illinois State Geological Survey Index:	J	(





RESIDENTIAL AND INDUSTRIAL WELL LOCATIONS IN THE DCP AREA

The following is an explanation of the ISWS Private Well Database Printout.

191 62111 100 11 1 BUNHS HUCKER 021040 X 2422 19 1 100 1 12.11

Columns Length Name Description

1-3 3 FIPS County Code Number

FIPS means Federal Information Processing System and is a Federal number to designate a county.

4-8 5 SCS County number

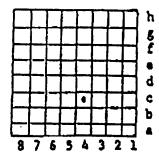
Field

SGS County number is the Geological Survey ID# that is assigned as an internal identification number.

9-18 10 Location Township columns 9-11
Range columns 12-14
Section columns 15-16
Plot columns 12-18

The location system uses the township, range, and section. The location consists of five parts: county, township, range, section, and coordinate within the section. Sections are divided into rows of 1/8-mile squares. Each 1/8-mile square contains 10 acres and corresponds to a quarter of a quarter of a quarter section. A normal section of 1 square mile contains 8 rows of 1/8-mile squares; an odd-sized section contains more or fewer rows. Rows are numbered from east to west and lettered from south to north as shown in the diagram.

St. Clair County T.2N., R.10W. Sec. 23



The location of the well shown above is STC 2N10W-23.4c. Where there is more than one well in a 10-acre square they are identified by arabic numbers after the lower-case letter in the well number.

Columns	Field Length	Name Description
93-94	2	Well type - A two letter code indicating the type of well Blank - Assumed drilled BD Bored and dug DU Dug (being phased out) DR Driven SP Sand point SG Spring
95-96	2	Aquifer type - A two letter code indicating aquifer type Blank - Undeterminable BR Bedrock UN Unconsolidated

The data in the Private Well Inventory Database is a listing of those non-municipal wells which are known to the Illinois State Water Survey (ISWS). This information has been entered verbatim from well logs submitted by the driller, from chemical analysis reports, from well sealing forms or well inventory forms from the 1930-34 well survey and other special projects. The accuracy of this data is controlled by those who submitted the form. Information in the private well database has not been field verified.

Columns	Field Length	Name	Description
19-48	30	Owner	
49-68	20	Driller	
69-75	7	Date	Honth columns 69-70 Day columns 71-72 Century columns 73 Year columns 74-75
76	1	issued permit  M Mine only irri P Publ supp E EPA N No fe	s and Minerals (after 1988 observation wells and gation wells) ic Health - all non-community lies - Gommunity supplies
77-82	6	Permit number	
83-86	4	Depth (in feet)	
87-90	4	L Log A Affid C Chemi I Inven X Indic	cal analysis
91-92	2	CM Comme CO Gonse DO Domes IN Indus IR Irrig MO Monit MU Munic NG Non-G	rvation tic trial ation oring ipal ommunity vation

163	01N09W047FLALUMIER E		0000943 29 C DU
163	OLNOPHOG JC RR & YARD	LAYNE HESTERN	0400947 105 L CM
163	OINOQNOBLAGARBEAU E	Dohrman	0901977M065458207 L DB
163	OTHOPHOSICOLIVER M	DS DRILL	0911974M032393140 L DO
163	OINO9WOB7EPIAT E		0000943 27 C DU
163	02H09N075DEIRCLE PKS CE	WATSON	0200742 120 L CN
143	02NO9NO75ECIRCLE PKG CO	LUKR	0000962 112 IC CM
163	02H09H07SECIRCLE PKE CD	LUHR	0719966 115 IC CM
163	02N09N076DCIRCLE PKG CD		0000941 111 LC CM
192	02NO9NO76EE SIDE PKS		0000706 100 L CM
143	02H09H076EHUNTER PKG CO	BUTLER	0421958 116 L CK
163	02NO9N076EHUNTER PKG CO	LAYNE NESTERN	0000948 106 I CM
143	OZNOPNO77EHUNTER PK8 CO	Frank	0322957 100 L SH
163	OZNOGWO77EHUNTER PKS CD	LUHR	0306956 106 LC CM
153	02NO9NO77FHUNTER PK6 CD		0000943 110 C CM
163	02N09W087APFIZER	LAYNE WESTERN	0814972H01&352115 L CM
163	02NO9NOB7APFIZER	RUESTER	1100983H109867117 L CH
163	02N09N092HPENN RR LAKE ROAD HOUSE	Watsch	0900941 115 L CM
163	02N09N097ANIEDERER DAIRY		0000936 96 CM
153	02N09W097ANIEDERER DAIRY	WATSON	0300946 98 LC CM
163	OZNO9W103DWATERLOG ICECREAM		0000942 122 C CM
163	C2NO9H103DWATERLOO ICECREAM		0000942 124 C CM
163	O2NO9H1066WALWORTH CO		0000943 122 C CM
163	OZNOPWIOBHWALWORTH CD		0000943 124 C CM
163265	19102NO9W151EFREEDOM COMERETE	ST CH DRILL	1208987N137981100 L CM
163	02NO9W157ASCHRANI J		0908964 98 L DD
163	02K09N16		000093C 110 C DC
163	02NO9N16 JONES PK		0000954 C PK
143	02N09W167AE ST LOUIS CASTINS		0200943 116 LC CM
153	OZNOŚWIŁBEWATERLDO ICECREAM	NATSCN	0909939 59 L CM
163	02NO9N172BAM ASPHALT RDUFING	NATSON	0200947 105 L CM
163	02N09W173BAM ASPHALT ROOFING		0000939 115 LC CM
163	02NO9W173FE ST LOUIS PK DIST		0000930 110 C PK
163	02N09W177FWILLIAMS PAINT CD	THORPE	0500929 117 L CM
143	02NO9W1776WILLAIRS PAINT CO(TEST)	LAYPE WESTERN	0000947 116 LX CM
163	02NO9W1776HILLIAMS PAINT CD	THORPE	0000947 114 L CH
163	OZNOŚKI776WILLIAMS PAINT CO	THORPE	0000947 115 L CH
163	02N09W177BWILLIAMS PAINT CD	THORPE	0600929 113 L CM
163	02N09W1776WILLIAMS PAINT CC(TEST)	LAYNE WESTERN	0000947 117 LX CX
163	OZNOPN1776HILLIAMS PAINT CP		0000928 100 C CM
163	02NO9N177HPF1ZER	THORPE	0000947 114 IC CM
163	OZNOPHI78BDRUG STORE		0000949 84 C CM
163	02NO9W187CROXY THEATRE		0000944 91 C CM
163	02NO9H187GBANNER ICE	MATSON	0000943 116 CL CH
163259	0302NCPN19 PRESTRESSED SLABS	ST CH DRILL	1029986H:26802100 L CM
163	OZNOPN193HHDHE ICEEREAM CD		0000933 115 LC CM
163	OZNOPNI PBEDBEAR NESTER CO		0000943 104 E CH
183	02NO9N198FCERTAIN TEED PROD		0903952 106 L CM
163	OZNOPH198FCERTAIN TEED PROD		1026950 110 L CM
163	OZNOVNI 98FOBEAR NESTER CO		0000943 104 C CM
163	02NO9N198SLEMP BREWING CO		0000946 720 C CM
192	OZNOPNZOBARLTON AND SOUTH RR	***	0000944 100 C IN
163	02N09W231ADPEN AIR THEATRE	WATSON	1000941 83 L CK
163-	OZNOVN231EPOPP R	ST CH DRILL	0727977N043742114 L DD
163	O2NOPH232FPOPP R	KOHNEH	0623964N11312561 L 1R
163	O2NOPH263HAM ZINC CO		97 C CM 1000940 1215L IN
163	02N09N29 ALUNINUM ORE COO	VAINETW	1000940 1215L IN 0119981N09811132 L DU
163	02H09N29551HD TRACK SUP INC 02H09H29BFCHEN TECK PROD	KOHNEN	0000972 98 IC CM
163	VINVYHIYOPUNEN IZUK FRUU		ANALLS 10 TP P4

ACTUANTITE ENTR NATUES

163	OZNICKIOJBNAT STOCK YD		0000967	108 C	CM
163	02NICM11 MISSOIRI ILL MATERIAL		0400943	115 L	CH
	7002N10N22 HONSANTO CHEM	- ··· - RANNEY	0800952	97 L	IN
	7202N10N22 MONSANTO CHEM	ranney	0800952	97 L	IN
	7102N10N22 HONSANTO CHEM	RANNEY	0907952	90 L	<b>JB</b>
163	02N10#23 AP BROCERY	HATSON	0600946	80 L	CN
163	02N10N241ECERTAIN TSED PROD		0000943	106 C	CH
163	02N10W241HCERTAIN TEED PROD	Hatson	1200942	123 L	CM
:63	02N10N25 MCBIL DIL		0000987	105 A	IN
163	OZNIOWZS MOBIL DIL		0000 <b>987</b>	109 A	IN
163	02N10W25 MOBIL OIL	EATSON	0000943	16 A	IN
163	02N10#25 HOBIL OIL	WATSON	0000940	115 A	IN
163	02N10N25 MOBIL DIL	NATSON	0000946	92 A	IN
163	02N10N25 HOBIL DIL	NATSON	0000951	106 A	In
163	02N10W25 WOBIL DIL (PLANT CLOSED		0000939	115 AX	IN
163	02N10N25 MONSANTO CHEMITEMPORAR		0404984H111		DU
163	O2H10N25 HONSANTO CHEMITEMPORAR		04047841111		DIJ
153	O2N10N25 MONSANTO CHEH (TEMPORAR		0405984M111		DU
163	O2N10525 MONSANTO CHEMITEHPORAR		04149E4M111		DLi
163	02N10N25 MONSANTO CHEM (TEMPORAR		0414984H111		DU
163	02N10N25 NONSANTO CHEMITEMPORAR		0414984N111		DU
163	02H10W25 HENSANTO CHEMITEMPORAR		04149B4M111		DU
163	02N1CN25 MEMBANTO CHEMITEHPORAR		0414984H111		DU
163	02N10W25 HONSANTO CHEMITEMPORAR		0414984N111		DU
163	02x10x25 MONSANTO CHEMITEHPORAR		04149847111		ממ
163	02N10N25 MENSANTO CHEMITENPORAR		0414984M11;		מט
163	OZNIOWZE MONSANTO CHEMITEMPORAR		0414984M111		DU
163	02N10W25 NONSANTO CHEN (TEMPORAR	Y) SARBATO	0414984#111	67058 LX	DU
163	02N1CW25 HONSANTO CHEM (TEMPORAR	Y) BARBATO	11144894140	67168 LX	DU
153	CZNIOKŹ5 MŌNŚĀKTŪ CHEM (TEMPORAR	Y) BARBATO	C414984M111		DC
162	O2N1CN25 HONSANTO CHEM (TEMPORAR	CTACRAS (Y	0414984M111	67368 LX	DU
1532569	P791HICH25 THE INC	ST CH DRILL	0702985H118	70:89 L	CM
14]	02N10W25 TWI INC	ST CH DRILL	12179828105		CH
163	02V10W255DMGBIL DIL	LUHR	0214961	107 LC	KI
163	CONTOWESSENDBIL DIL	LUHR	0000959	114 C	IN
143	OZNION25&AMIDWEST RUBBER CD	THORPE	0500 <b>95</b> 1	110 L	CH
163	02N10W256ESDCCNY DIL	Watson	0000943	95 L	IN
163	OZNIONZSTBHONSANTO CHEM		0000920	100 L	IN
163	OZNIQW257EMOBIL OIL	LUHR	0411957	113 L	IN
163	O2N1QN2S7EMOBIL GIL	THORPE	0000951	106 LA	18
163	02N16W257ESOCONY MOBIL DIL	MCSTAW	0000955	112 L	IN
163	02N10H26 AN AG CHEN CO	MOSTAK	000000	102 L	Ki
143	02N19W26 LEWIN MATHES	WATSON	0200947	104 L	CH
163	02N10W26 MIDEWST RUBBER CO	THORPE	1200946	111 L	CM
163	02N10M26 HIDKEST RUBBER	Watson	0321960	113 L	CH
:63	02N19N26 HIDWEST RUBBER CO	MORGAN	0000950	108 L	CH
163	OZNIÓWZA MIDWEST RUBBER CO	MORSAN	0000950	114 L	CH
143	02M10W26 HIDWEST RUBBER CO	WATSON	1007959	116 L	CM
163	OZNIOWZ61EHONSANTO CHEM		0000947	105 C	IN
163	02N10N2b1ESTERLING STEEL CASTING		0000942	95 LC	CM
163	02N10W261GHONSANTO CHEH (TEST)	WATEDN	0000950	108 LX	IN
163	02N10N261HCNS PLANT US ARMY		0000941	100 LC	CM
163	02NIOW261HCHS PLANT US ARKY		0700941	105 L	CH
163	OZNI DWZ62DSTERLIHS STEEL CATSING		0000973	2	CH
163	OZNIPWZ6ZEMONSANTO CHEM		0000947	105 C	IN
143	02N1DW262EMONSANTO CHEM		0300941	107 LC	IN
163	02N1DW262EHONSANTO CHEM	WATSON	0000941	107 L	IN
163	02N16N262HAM ZINC CO(ABANDONED)	Hatsdh	0000943	107 LX	CM

**ΔΥΡΑΝΝ** 

163	02NION263DLEWIN MATHES		0000942	110	C	CM
163	02N10@2636HONSANTO CHEM		0100942	110	LC	IN
163	OZNIONZEJGHUNSANTO CHEM		1000939	105	LC	IN
163	OZNIONZASHAN ZINC CO	WATSON	0100942	105	LC	CM
163	C2N10N264DLENIN MATHES	WATSON	0600948	101	ι	CM
163	02%10%264EMONSARTO CHEM		0000947	109	Ç	IN
163	02N10N264FNONSANTO CHEM		1000939	165	LC	IN
153	OZNIO#264SMONSANTO CHEM		0200943	104	LC	IN
163	OZNIONZ65DCERRO COPPER BRASS	LUHR	0000970	111	13	CM
163	D2N10#265DDARLING CO		0000939	76	FC	ch
163	OZNIONZSABNIENEST RUBBER CO	THORPE	0300951	112	FC	CH
:43	OZNIONZEBACLAYTON CHEM CO	ST CH DRILL	02259837106208	190	L	CM
163	OZNIONZBRACKAYTON CHEN CO	ST CH DRILL	04129768045480	78	L	CH
163	CZNIOWZ68AMIOWEST RUBBER	LUHR	0906968M004849	1115	FC	CH
1630	137602N10H27 HONSANTO CHEM	rankey	0000952	100	L	Я
163	02H10N27 HONSANTO CHEM	RANNEY	0801952	99	L	IN
163	02N10H27 HONSANTO CHEX	RANNEY	0826952	97	L	IN
163	02N10N2735HONSANTO CHEH	LUXR	0600 <b>959</b>	101	Ļ	IN
163	02N10N273HHONSANTO CHEN	RANNEY	0000952	102	I	IN
163	QZN1OW366BAP BRUCERY	WATSON	0500946	120	L	CM
163	OZNION331FCARSILL ELEVATOR	NATSON	0600952	105	L	CH
163	O2NION333FHOBIL OIL	FUESTER	0217984H111171	98	L	in
163	02N10N34 PHILLIPS PETRO	MATSON	0000000	23	L	CM
153	02N1ON34 US COVT		0000000		L	RW
163	OZNIĆN342FPHILLIPS PETRO	LAYNE WESTERN	0500978	100	IC	CH
163	02N10N342FPHILLIPS PETRO	RUESTER	04289787072589	102	L	CX
163	02NION3426PHILLIPS PETRO		0000943	73	-	SH
163	02N1CH345FCORPS OF ENGINEERS		1015947	102	L	CM
163	CONTOWNS SAUP DIL AND READY CONCRETE	ST CH DRILL	11079777068630	1103	t	CM

Reference Number 5

 Brent Manning Director

> John W. Comerio Deputy Director

**Illinois** 



Bruce F. Clay Assistant Director LINCOLN TOWER PLAZA • 524 SOUTH SECOND STREET • SPRINGFIELD 62701-1787 CHICAGO OFFICE • ROOM 4-300 • 100 WEST RANDOLPH 60601

June 24, 1991

Mr. Tim Murphy IL EPA/LPC P.O. Box 19276 Springfield, IL 62794-9276

Re: ILD #980606982, 000672329, 000605790, 000722074, 000665836

Sauget Sites Area #2

Dear Mr. Murphy:

In response to your June 10, 1991 request the Department has reviewed the proposed CERCLIS Sites (Sauget Area #2) in St. Clair County.

There are no sensitive areas on site, but there are several sensitive areas in the  $0-\frac{1}{4}$  and  $\frac{1}{4}$  to  $\frac{1}{2}$  mile radius of the site and along the water path, both on the Illinois and Missouri Sides.

The Resource Inventory for the Mississippi River for the 178-162 River Miles (see attached information) shows fish spawning areas, commercial fishing areas, sport fishing areas, important wildlife habitat and bald eagle use at selected areas in this reach.

Also, during September, 1989 fish contaminant sampling we observed numerous (~100) 9-12 inch sauger using this area of the river between RM. 178-176. Large numbers of channel catfish and white bass were also observed. It is likely these species also use much of the 178-162 mile reach.

Thank you for the opportunity to comment. If you need further information please advise.

Sincerely,

Richard W. Lutz, Supervisor Impact Analysis Section Division of Planzing

RWL:ts

Att: sensitive areas form Resource Inventory maps

RECEIVED

JUN 2 6 1991

IEPA/DLPC

DEPARTMENT	OF	CONSERV	MOITAL	IDE	NTIFICATION	ŪF
ENV1	RON	MENTAL	SENSIT	IVE	areas	

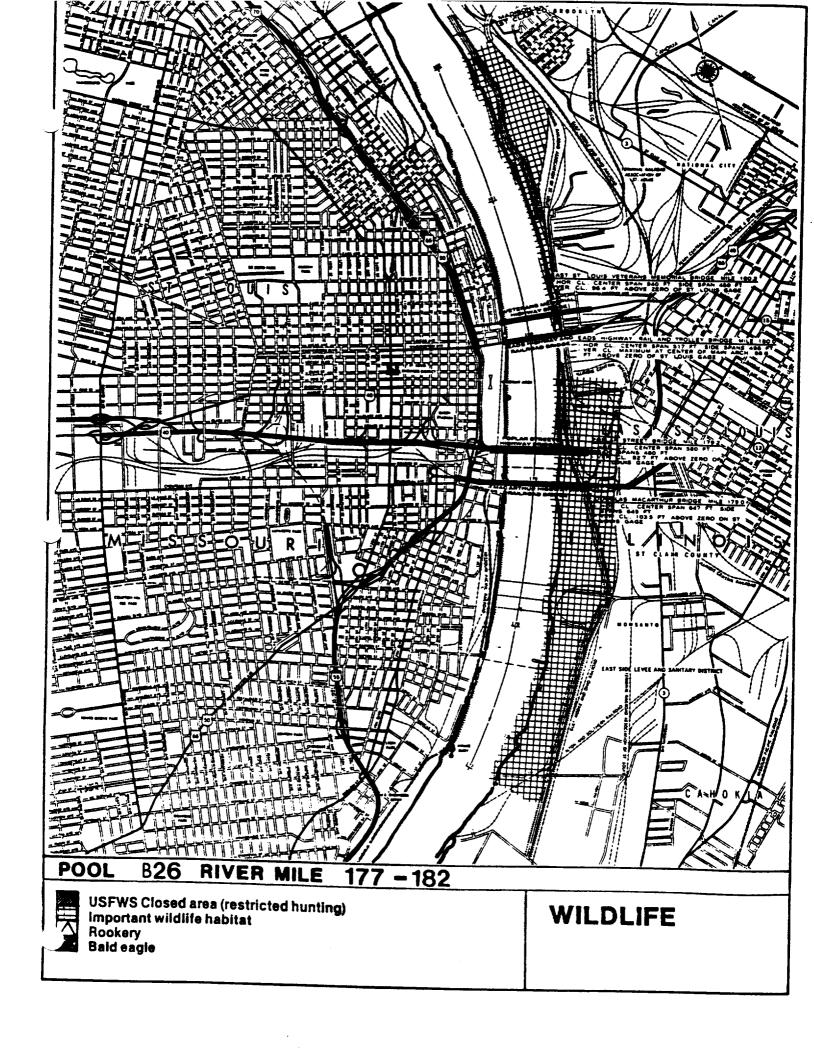
-== None in Ares

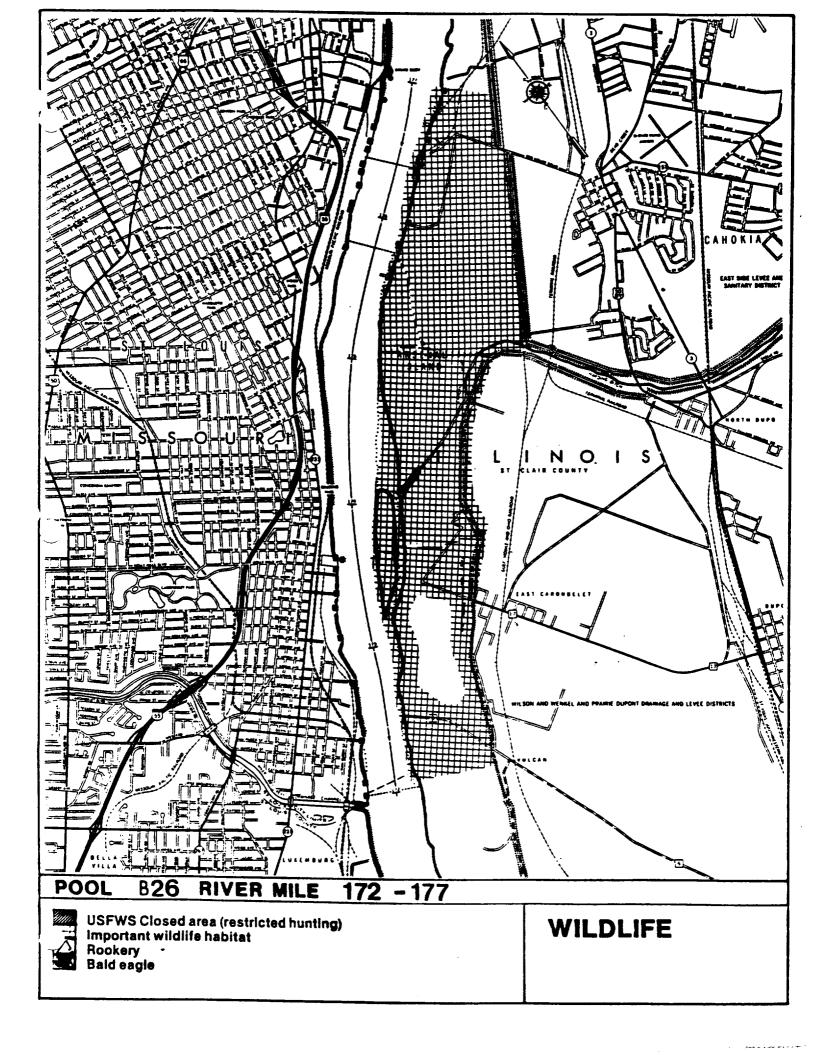
000 665836 1LD# 980606982 000 672329 000 605790

TARGET DISTANCE CATEGORIES

	SENSITIVE ENVIRONMENTS	On-site	0-1/4 mile	1/4-1/2 mile	stream milage
Ι.	Critical habitat for Federally designated or proposed endangered or threatened species				
II.	Habitat known to be used by Federally designated or proposed endangered or threatened species		_		*
111.	State wildlife refuge				
IV.	Spawning areas critical for the maintenance of fish/ shellfish species within a river system		*	*	*
v.	Terrestrial areas utilized by large or dense aggregations of verbebrate animals for breeding	(			*
VI.	Habitat known to be used by State designated or threatened species			<b>_</b>	*
VII.	Habitat known to be used by a species under review as to its Federal endangered or threatened status	_			_
VIII	. State lands designated for wildlife or game management	_	<del></del>		*
IX.	State designated natural area				
х.	Particular areas, relatively small in size, important to the maintenance of unique biotic communities		_	-	

If any of the sensitive areas identified above exist within the designated target distance limits, please post an asterisk (*) in the appropriate column.





## River Mile 177-182

## Recreation

- 179.6(L) The East St. Louis Access contains bank fishing and a scenic view of Gateway Arch.
- 179.7(R) St. Louis City Harbor (toat ramp and marina).
- 179.8(R) Jefferson National Expansion Memorial.

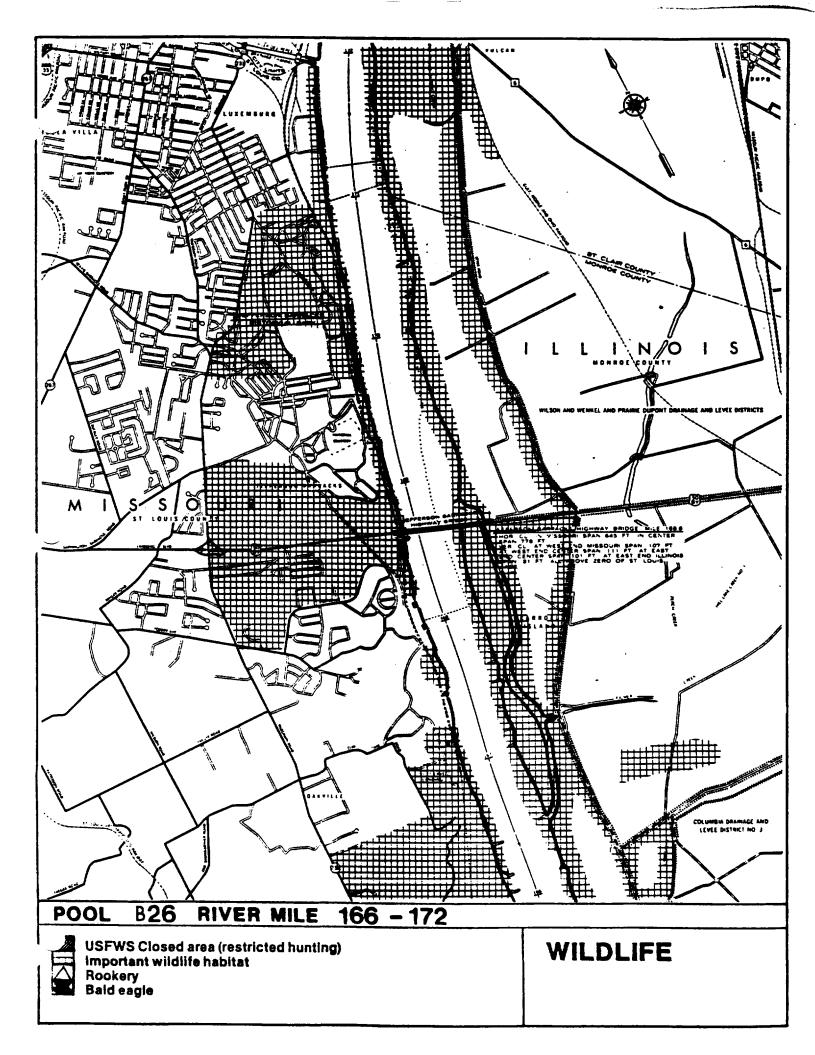
## River Mile 172-177

# Wilclite

173.5-176.0(L) - Important area for mourning dove.

## Recreation

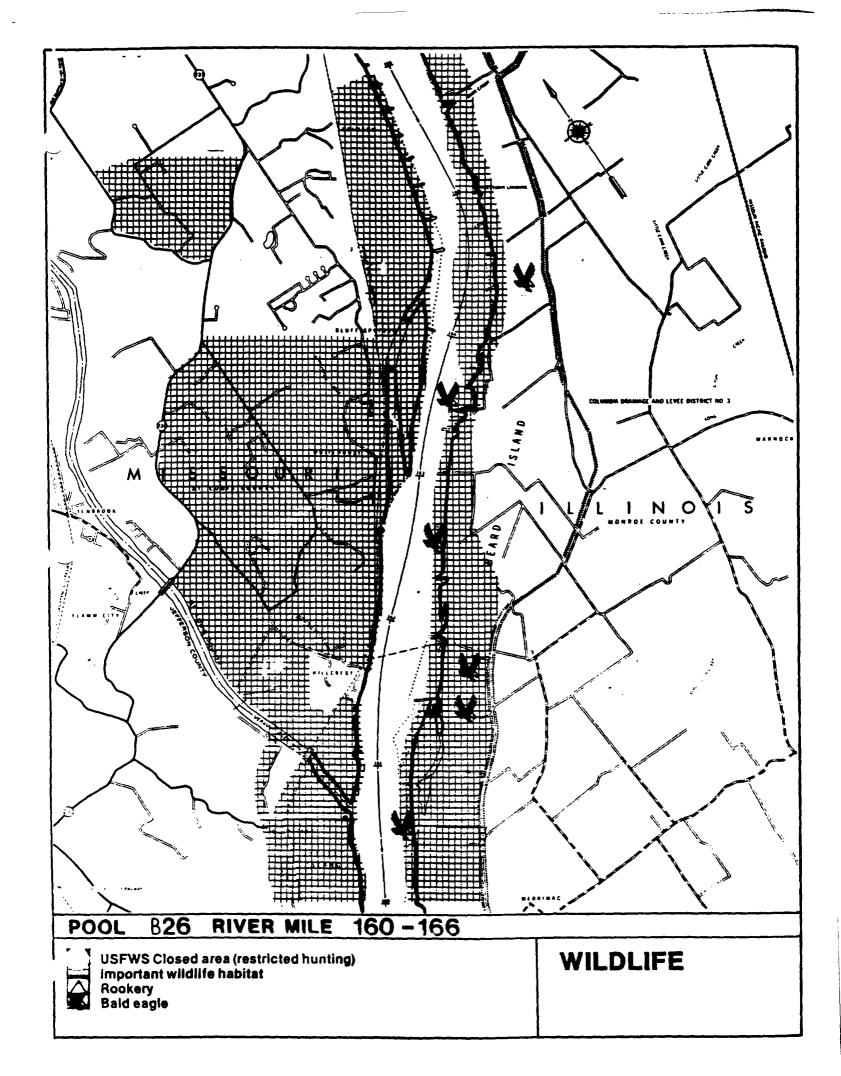
174.4(R) - Upper and Lower Bellerive Park.



## River Mile 166-172

## Recreation

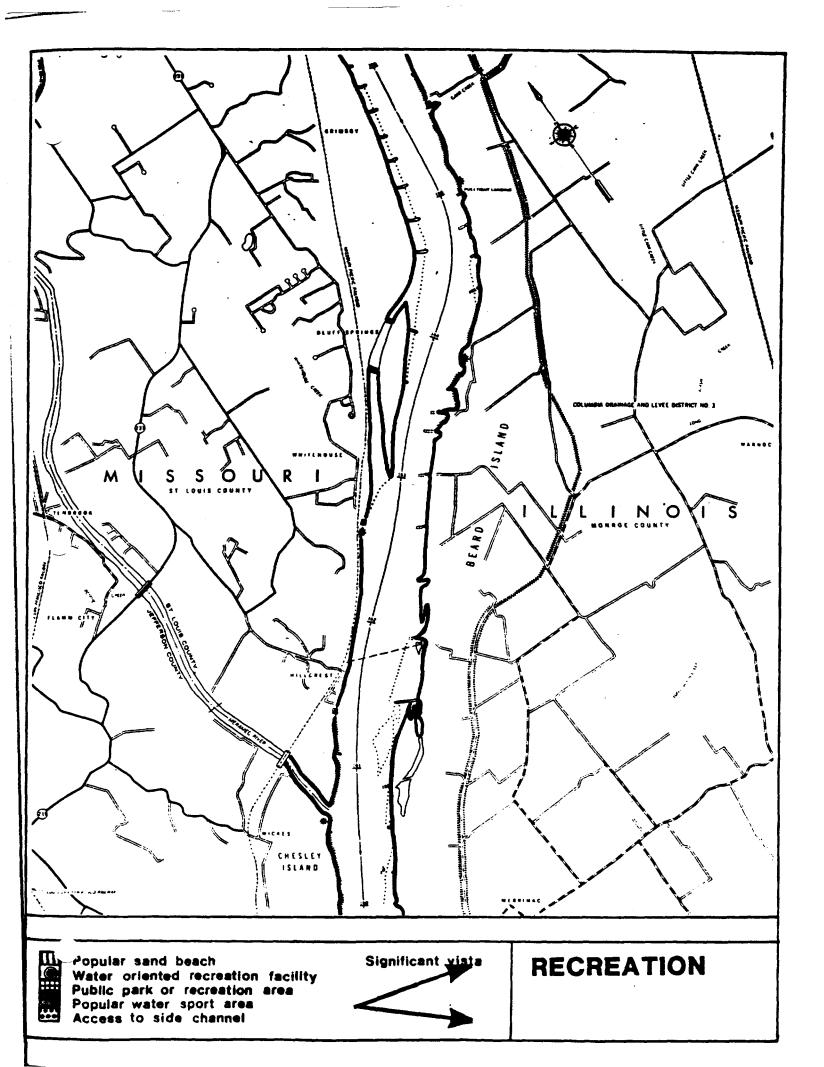
- 167.6(R) Cliff Cave contains a picnic area, bluffs, and caves. The Cliff Cave Natural Area is also located here.
- 170.0-171.0(R) Jefferson Barracks Historical Park (camping, picnic area, historic site).
- 171.5(%) Black Forest Park (picnic area).

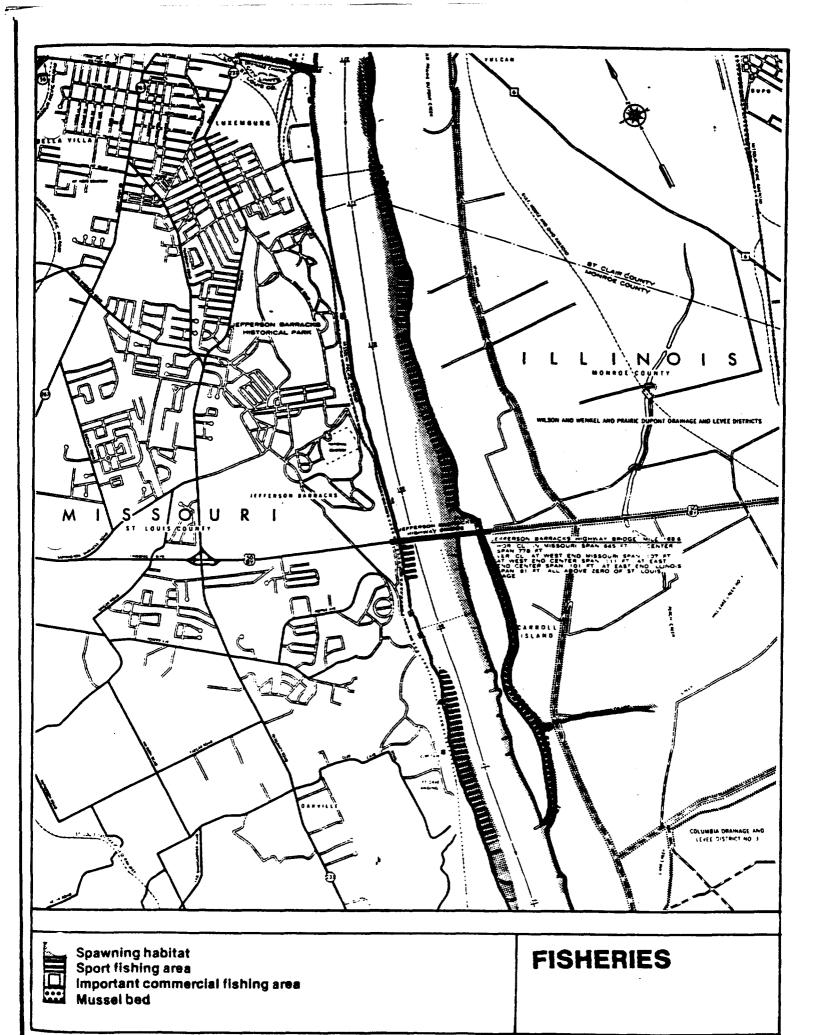


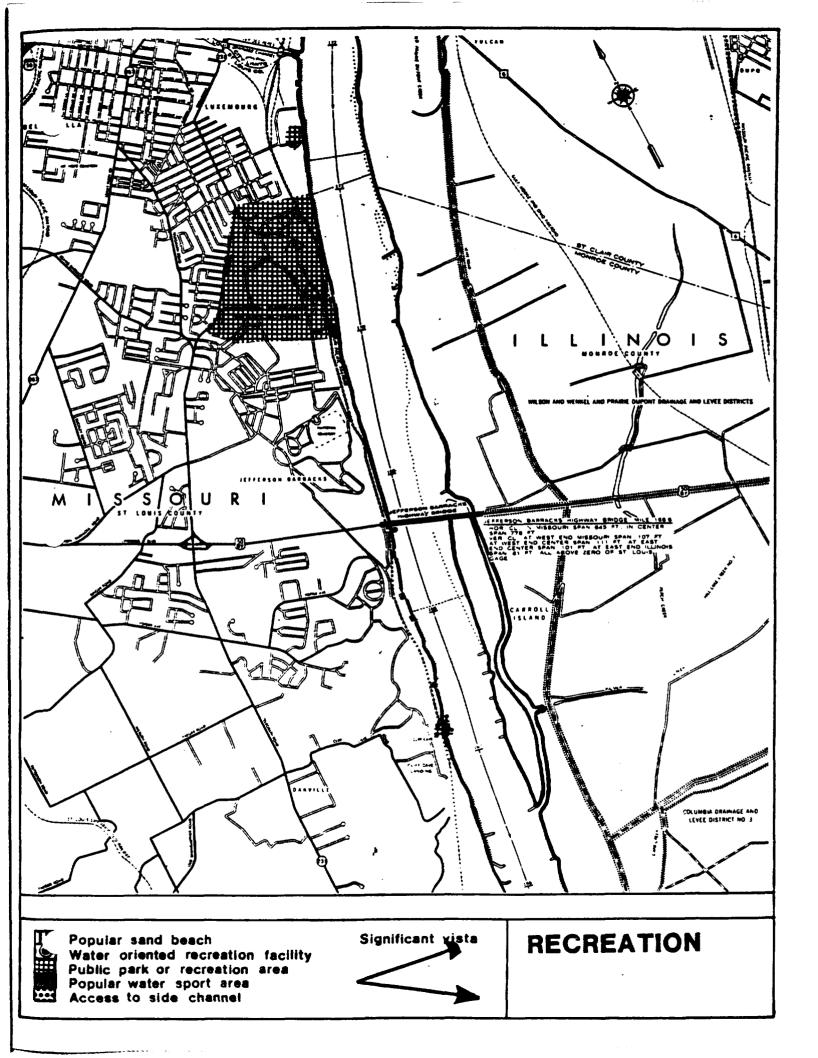
## River Mile 160-166

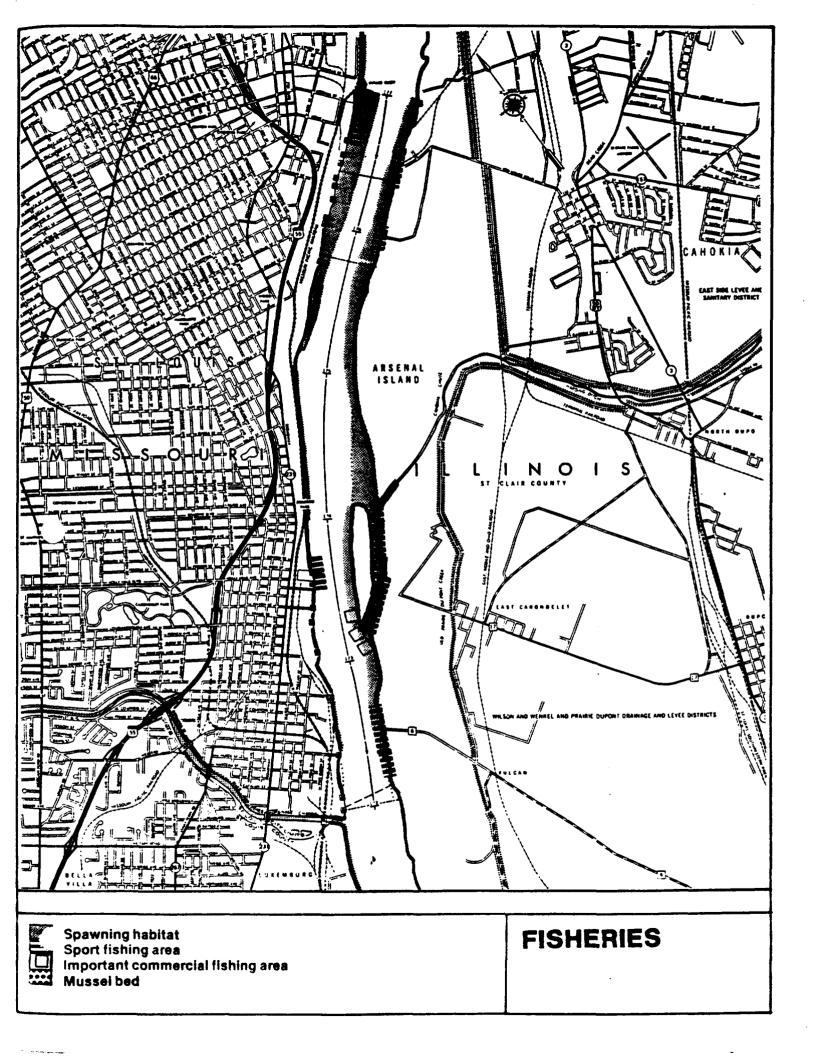
## Recreation

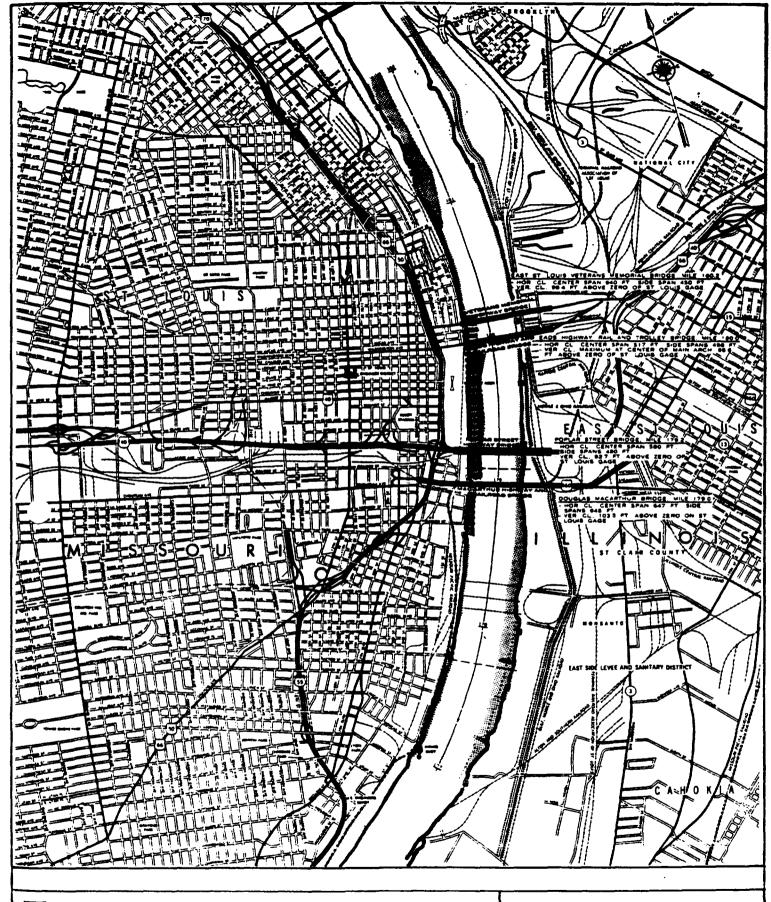
162.8 - Bee Tree (hiking trail and picnic area).













Spawning habitat
Sport fishing area
Important commercial fishing area
Mussel bed

**FISHERIES** 

